Cavendish Lecture

ON THE

ALTERED RELATIONS OF SURGERY TO MEDICINE.

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GENTLEMEN,—No one having even a limited acquaintance with surgical history can fail to realise the great change that has recently taken place in the status of the surgical branch of our profession, as well as the remarkable alteration that has occurred in the relations it now bears to medicine. In considering the important question as to the causes that have led to these changes, we may glance briefly at the relations that formerly existed between surgery and medicine. The two branches of our common profession became united in the first half of the fifteenth century, and a conjoint examination for admission to the fellowship of physicians and surgeons was established.[1] Unhappily, however, the alliance appears to have been a short-lived one, and the causes that led to the rupture are not very clearly understood, but were, I believe, probably connected with the maintenance of alleged vested rights. The breach was still further widened by the subsequent fusion of the surgeons with the Barbers' Company. In this, however, as Sir James Paget has rightly observed, there was not any real fusion, but rather an official junction with a view to the settlement of disputes and the fixing of limitations to the duties and functions of each company. In the interests not only of the social, but also of the scientific, position of the surgical profession, the junction, such as it was, of these two corporations was undoubtedly a calamity, and it helped to give the physicians the vantage ground which they occupied so long, and in which they were still further strengthened by an enactment made in Elizabeth's reign, prohibiting surgeons from prescribing internal medicines. As a proof that the inferior position, socially and scientifically, was maintained up to a comparatively recent period, I may mention a fact which I learned from Mr. Colles, who informed me that his father, Abraham Colles, had stated that at the commencement of his professional career in Dublin, when a consultation on any important case was held, the surgeon was not as a rule permitted to be in the room where the physicians held their deliberations, but after the consultation was over he was informed whether his services would be required or not. The junction not only kept the professions of surgery and medicine separated, but also doubtless had much to say to the long exclusion, or at all events feeble recognition, of surgery in the academic systems of the old universities. It had also another unfortunate result, which was that when surgery emerged from the Cimmerian darkness in which it had been during the middle ages, and its teachers recognised the fact that in order to advance something more was to be relied on than the aphorisms of Hippocrates or the dogmas of Galen, there was little sympathy shown to them, and scientific methods of investigation were looked upon generally with suspicion, while the results of scientific research were received almost with contempt.

Although from time to time during the sixteenth and seventeenth centuries there were physicians of undoubted ability and scientific aptitude, still no serious effort apparently was made by the bulk of the profession to strike away the feeble props of the tottering and antiquated tripod on which it had so long rested—namely, empiricism, dogma, and aphorism. The result of this was that as time went on medicine as a science lost instead of gaining ground in public estimation, and often became the object of satire and ridicule. Of this ample evidence may be found in the writings of many authors and philosophers of eminence, such as Voltaire, Molière, Locke, and many others in more recent times. It was doubtless from observing the faulty way in which medicine was studied and practised that Locke was induced to make the following observation: "Were it my business to understand physic, would not the safer way be to consult Nature herself in the history of diseases and their cures, than to espouse the doctrines of the dogmatists, the methodists, or the chemists?" What was mainly relied on was clinical observation; and nothing is more remarkable in the whole history of medicine than the length of time it took before the fact dawned upon the medical mind that clinical observation, when not supplemented by other scientific methods of research, is a lamp that affords, in truth, but a faint and glimmering light, a shifting quicksand on which it is indeed perilous to build. They did not recognise the truth epitomised by Mill, who has well said, "Observation without experiment (supposing no aid from deduction) can ascertain sequences and coexistences, but cannot prove causation."[2]

The consequences of too exclusive a reliance upon methods insufficient for purposes of real advancement have been for medicine in the past most unhappy. I allude more particularly to the foundation and advocacy of various systems which prevailed at different eras—of, for example, the dogmatists, eclectics, methodists, pneumatists, astrologers, and alchemists; and in later times to the schools of Cullen, Brown, Broussais, and Hahnemann. All these many outcomes of various phases of opinion have caused the history of medicine to be rather a "succession of cycles, barren hypotheses, and fanciful systems," than one characterised by a slow but sure scientific progress. At rare intervals in its history, brilliant meteors, no doubt, have flashed across the sky, but their light only tended to make the darkness more visible. They were too far in advance of their time to make their influence felt, and any attempt to supersede the older unreliable methods—to ring out the old and ring in the new—only met with discouragement, often with contempt. My father has often related to me how, when he was a young man, and when he introduced into the Dublin school, along with Graves, the methods of physical diagnosis advocated by Laennec and Louis, he was ridiculed, satirised, and even caricatured, by his contemporaries. I dare say a large proportion of those present here to-day recollect, as I do, hearing various instruments of precision now in the hands of every educated practitioner stigmatised as "toys"; and I can even call to mind that a late medical colleague of my own, who rose to considerable eminence in his profession, and who for the time he lived in was a skilful histologist, thought it desirable to publish at the commencement of his professional career a *brochure* which he entitled "An Apology for the Microscope." But one of the most signal proofs of the low estimate that in former times physicians had of the employment of methods of research now universally used may be obtained from the views on pathological histology of Laennec. He observed: "If the causes of severe diseases are sought for in mere microscopical alterations of structure, it is impossible to avoid running into consequences the most absurd; and if ever cultivated in this spirit, pathological anatomy, as well as that of the body in a sound state, will soon fall from the rank which it holds among the physical sciences, and become a mere tissue of hypotheses founded on optical illusions and fanciful speculations, without any real benefit to medicine." An unfortunate anticipation, Dr. Hudson observed, as time and progress have proved. When men of the intellectual grasp of Laennec held such views, it is hardly to be wondered at that the rank and file among physicians continued to look unfavourably and with doubt on all such novel methods of research, and under these circumstances it is not surprising that medical therapeusis in the past, and I fear to a certain extent also in the present, has been based too often on that flimsiest and most worthless of all foundations—fashion; a fact which doubtless suggested to the eminent French physician the sage advice he gave to his pupils: "Employez vite ce remède pendant qu'il guérit encore!"

In making these remarks, I trust it will not be considered that I wish in any way to cast discredit on the labours of past physicians in the advancement of medicine, knowing as I do that the very men who were thus sceptical of new methods could always point with just pride to splendid results obtained by them from time to time. My object is

[1] See Memorials of the Craft of Surgery in England. From materials compiled by J. F. South. London, 1886.

[2] Logic, vol. i., p. 423.

only to account for the fact that in the last century the relations between medicine and surgery were still deficient in cordiality. Old antagonistic traditions and feelings survived, and the breach was only widened for the time by the new departure of surgery into hitherto untried methods of advance, by the renunciation of the exclusive reliance on mere clinical observation, and by a general widening of the area of research. And to whom are we mainly indebted for such development? This is a question that will at once be asked. Who placed our science on the solid foundation on which it remains, and will ever rest? Who was it that tore asunder the fetters with which it was bound by a blighting empiricism, and loudly sounded those clarion notes of scientific truth which have their echo still? He who occupies as a biologist a position above all rivalry, and who by the magic wand of an all-powerful intellect struck the rock from which came the living water, and evoked the dormant scientific spirit of his age—that beneficent, ever-living, and never-failing spirit which, when honestly appealed to, has ever generously responded. It has been said by Malgaigne that in the middle ages surgery was a mere craft, that it was made an art by A. Paré and J. L. Petit, but was elevated into one of the noblest of sciences by John Hunter. Animated by no unworthy craving for worldly honour or love of gain, he lit up the dark and rugged paths of that science he loved so well, and to which he devoted his life, with a lamp which shed no borrowed light—one fashioned by ceaseless toil and illuminated by untiring genius. His one aim, the goal he ever strove for, the ambition of his life, was, in the unexplored regions of physiology, surgery, pathology, and anatomy, to unfurl the banner of truth, and by doing so to elevate and dignify the profession of his choice, and to render it and its sister branch of medicine one and indivisible. He was, in truth,

> "One of the few, Nature's interpreters,
> The few whom Genius gives as lights to shine."

His immediate successors, many of whom were also his pupils—viz., Abernethy, Cooper, Cline, Dupuytren, Colles, and many lesser stars,—all worked more or less on the same lines that he did, but not unnaturally with a bias rather towards the clinical and operative aspects of surgery and surgical pathology than in efforts to advance it by physiological research. But the splendid work of those great surgical leaders I have mentioned cleared and prepared the way for the more complete adoption of Hunter's great principle in advancing surgery, which was, in Sir James Paget's words, that "he brought the scientific method into the study of the practice, and welded scientific knowledge with the lessons of experience." It is the recognition and adoption of this principle in the age in which we live and work that will ever constitute one of its greatest glories. It is one which finds its embodiment in von Langenbeck's watchword: "From physiology to surgery, and from the microscope to the resection knife." It has mainly been the cause of bringing about the altered relations of surgery to medicine, and happily shattered the barriers between them which in days gone by were such fruitful sources of mischief, and kept our profession divided, powerless, and weak. The last and most brilliant outcome of the adoption of this principle has been the establishment of Listerian antisepticism, which has enabled the surgeon to bring about not only a degree of perfection and exactness in the comparatively limited field of operative surgery in which until recently he confined himself, but also to advance much further, and in abdominal and thoracic diseases, and, lastly, in those of the brain and spinal cord, to achieve results that until recently never could have been seriously contemplated. This signal advance into the domain of medicine has not been made in any hostile and intrusive spirit, but solely to render aid—an aid which it must be gratefully acknowledged has happily often been reciprocated.

It has been granted to but few men who have been pioneers in any of the paths of science to have during their lifetime a full recognition of their labours and discoveries, and to see the practical application to human requirements of the new knowledge they had given to the world. Harvey's great discovery met with but a limited acceptance during his lifetime, and the same might be said of other scientists, some of whom, instead of having their views accepted, were persecuted for promulgating them; but many of those who now constitute the scientific vanguard of our profession have been privileged to witness not alone the acceptance of their theories, but also the almost universal recognition of the utility of the practice which has been based thereon; and operative procedures have been undertaken and carried to a successful issue that not very long ago could never have been seriously thought of; and, lastly, a distinct advance has been made towards that goal desired by all—unity in the science of medicine.

I have already indicated the regions in which operative surgery has so largely supplemented medicine. Did time permit, I would gladly dwell more in detail on what it has effected in this direction, such as the surgical treatment of pulmonary abscess, antiseptic paracentesis in pleuritic effusions, empyema, and pericardial effusion; also in abdominal surgery, including exploratory operations in and excision of the kidney, removal of renal calculi, operations on the gall-bladder, on the intestines for obstruction, excision of the pylorus and other portions of the intestinal tract for cancer, and the many operations connected with the female organs of generation. In connexion, however, with a region that until recently has been held to be the exclusive province of the physician, I should like to speak very briefly. I allude to certain lesions of the brain, and the means we have at our disposal for their localisation. It is a subject of absorbing interest, and exercises largely, as you all know, the professional mind at the present day. There is no wonder that it should do so, for our anticipations as to what may eventually be done in this direction are full of hope and confidence. Having regard to the results already obtained, these are not, I feel assured, misplaced. But still cases do occur, and one of them was recently in my own practice, which strikingly brings home to us the undoubted and unhappy fact that, notwithstanding the admirable work achieved by Professors Ferrier, Yeo, Schäfer, Victor Horsley, Munk, Goltz, and others, in reference to the localisation of brain function, we must admit that we are still only on the fringe of the inquiry, so to say, and that much, very much, has yet to be done before any definiteness can be said to exist in the means at our disposal for the accurate appreciation of many of these cases. This will not, I believe, be determined with sufficient accuracy until much more light than is at present available is thrown, not only on cranio-cerebral topography, but also on the localisation of cerebral function. We are undoubtedly much nearer finality in the former than the latter, although the difficulties in the path are still extreme. The relations between the lobes and convolutions of the brain and the enveloping bones vary in different periods of life, and up to a certain age the growth and development of both do not proceed *pari passu*. The frontal eminence, as Cunningham, Topinard, and Ferć have shown, overlies a different portion of the frontal lobe of the brain in the adult and child; and the relations between the Sylvian fissure and the squamo-parietal suture, as first noticed by Foulhouze, also vary in different periods of life. Remarkable changes in the temporo-sphenoidal lobe have also been observed, both as regards its position and form, as age advances from childhood to adolescence. For example, in the adult the frontal eminence corresponds to the first frontal fissure; in childhood the frontal eminence is found at some point upon the second frontal convolution, and occasionally on the third. Again, the Sylvian fissure varies in relation to the squamo-parietal suture. In the adult it may correspond to it or be placed immediately above or slightly below it, but in childhood it is always found considerably above it. The high position of the fissure in childhood appears to be due to a twofold cause—one to the low stature, if I might so express it, of the squamous portion of the temporal bone, which afterwards grows upwards towards the fissure; and, secondly, that at the earlier period of life there is relatively a much greater area of the temporo-sphenoidal lobe in relation to the vault of the cranium. This is seen when compared with the outer surface of the parietal lobe. The method of topographical localisation when the relations are more fixed or constant, as in adult life, suggested by Hare, gives for practical purposes undoubtedly the best and most accurate results. As regards the localisation of function, however, it is regrettable that even between very high authorities so much difference of opinion exists, and that the whole subject is consequently in such an unsettled state. Take, for example, the temporo-sphenoidal lobe. According to Professor Ferrier, we have here the situations of tactile sensibility, hearing, and taste; whereas Professor Schäfer holds that none of these are so placed. Again, the centre of sight has been localised by Munk and Schäfer in the occipital lobe; but Goltz has shown

that this lobe can be removed without impairing vision, and that removal of the frontal lobe is attended with loss of sight. Our clinical experience, too, at times adds largely to the difficulties we have to contend with in our endeavours to accurately appreciate the situation of cerebral lesions. I allude to cases in which we have motor disturbance without appreciable lesion to account for it, and the reverse—cases in which morbid conditions, profoundly involving the motor areas, exist without causing any motor or sensory trouble whatever. In illustration of this I may mention the leading particulars of a few cases, and in doing so trust it will not be supposed for a moment that I wish to depreciate or detract in the slightest degree from the great value of recent investigations in reference to the localisation of cerebral function. The first of them that I would mention was one which was quite recently under my care in the Richmond Hospital, and was of exceptional perplexity.

J. O'D——, aged forty, a law clerk by occupation, and for many years of intemperate habits, was recently under my care in the Richmond Hospital. Two days previously to his admission he had been drinking to excess in a neighbouring public-house, and for making a disturbance on his way home was arrested. In the encounter which ensued with the authorities, it was said he was struck with a baton on the forehead, over the left eye. He was stunned by the blow, but soon recovered. On the second day after receiving the blow he suffered pain, which was chiefly referable to the forehead, and in the evening he became heavy and drowsy. The day following he was aphasic, and he was then brought to the hospital. On his admission, a contused wound was found over the left eyebrow, and much subconjunctival ecchymosis. When speaking, he was unable to form a complete sentence, failing generally to find the required verb. When the word he wanted was suggested to him, he at once recognised it, but was unable to repeat it. He conveyed that he could remember the word he wanted easily, but could not say it. When shown a watch he was able to tell the time accurately, and without hesitation; but when asked to write a sentence he failed, and wrote some disjointed words, but was able to write his name. In the evening the aphasia was more pronounced. He could tell the name, but not the address, of his employer. He said it was the same as a Christian name. On going through a list of names, he at once recognised the one he wanted when "George's-street" was mentioned. There was no paralysis at this time of the upper or lower extremities. Next day it was found that speech was completely lost. There was rigidity of the muscles of the jaw, and he was quite unable to open his mouth. The left forearm and hand were paralysed, and the fingers clenched. The scapulo-humeral muscles on the left side were only slightly affected. He could grasp firmly with his right hand. The left pupil was irregularly dilated, and did not react to light; vision was lost in it, and there was slight ptosis. When given a pencil and paper, he could write his name, but very indistinctly. Patellar and plantar reflexes were well marked. The day following his condition was worse. In the evening he had an alleged rigor, which probably was a convulsive seizure. Next day all the symptoms were still more pronounced; the patient was now in a semi-comatose state, jaws rigidly closed, his respiration blowing, accompanied by constant grinding of teeth. Throughout his condition was perfectly apyrexial. With such a history and train of symptoms the conclusion was unavoidable that they were produced by mechanical pressure. The patient, who had never before manifested symptoms of brain disease, had received a severe blow on the left side of his head. This was followed by progressive motor aphasia, an irregularly dilated pupil, loss of vision, subconjunctival ecchymosis, ptosis, blowing respiration, rigidity of the muscles of the jaw, paralysis of left forearm and hand, a convulsive seizure, and lastly coma. These symptoms seemed to clearly point to mechanical surface pressure over the left motor area, over or in the neighbourhood of Broca's convolution, followed by basic complication, as evidenced by the implication of the third and fifth pair of nerves producing the symptoms referable to the eye and the muscles of the jaw, and, lastly, there was paralysis of the forearm and hand, which latter was the great difficulty in the case. The pressure, either hæmorrhagic or inflammatory, I believed primarily involved Broca's lobe, and the basic complications I considered were probably due to extension of the effusion. Having regard to the fact that the patient was clearly *in extremis*, and that trephining gave him what might be termed the shadow of a chance, I operated and removed a disc of bone over Broca's lobe, and the result being negative I removed another a little further back. Neither operation revealed a source of pressure. The patient died the next morning, and the result of the necropsy was as negative in its results as the operations had been. There was neither hæmorrhage nor abscess; the brain substance was whiter and harder than normal, the condition observed so often in alcoholism. The only tangible changes observed were evidence of arachnoid inflammation, which was all the more remarkable having regard to the apyrexial condition of the patient throughout, and also a thickening and adhesion of the meninges over the upper portion of the right motor area, which presented no signs of recent development, and under which was a small patch of softening about the size of a large pea. A careful examination of the cerebral vessels failed to give evidence of the existence of embolism.

In this most remarkable and exceptional case, in which so many of the symptoms of cerebral pressure supervened on the receipt of a severe injury, it was, indeed, as surprising as it was disappointing to find that they depended on some condition independent of mechanical pressure, and it proves how far we are still, even when the symptoms are signal and pronounced, from being able in many instances to correctly estimate the phenomena in cases of cerebral lesion, and especially in those having apparently a traumatic origin.

Dr. Bennett has drawn attention to a remarkable case of mono-crural paralysis, which was under the care of a disciple of Professor Ferrier, and the site of the supposed central lesion was carefully indicated on the skull. Subsequently the patient was under Dr. Bennett's care for epileptic seizures, which ultimately proved fatal, and which were attributed to renal disease. Having regard to the mono-crural paralysis, a careful post-mortem examination was made, but without discovering any evidence of a lesion either of the brain or its coverings.

We have too, on the other hand, cases recorded in which there has been marked intra-cranial disease invading the motor zones, but without producing any motor disorder, as, for example, in the remarkable case of subarachnoid cyst recorded by Prof. Cunningham.[3] In this case the cyst—one of exceptionally large dimensions—was limited in front by the Rolandic fissure, below by the parallel fissure, above by the intra-parietal fissure, and posteriorly it reached the occipital lobe; and yet in this case there was no evidence whatever of impairment of motor or sensory power. Another case illustrative of the fact that serious lesions involving the motor area may exist without producing paralysis is one recorded by Dr. Byrom Bramwell. In this a large sarcoma growing from the dura mater "had apparently destroyed the greater part of the motor area on the right side. So far as one could judge with the naked eye, the whole of the motor centres in the face and upper extremity were destroyed, and on microscopical examination the grey matter in this region seemed to have completely disappeared; and yet there was absolutely no paralysis."[4]

From these interesting but somewhat dispiriting facts—which, unhappily, remind us of the dense mist in which we are still surrounded—let us glance at the brighter side of the picture, and consider some of the cases that give us encouragement and tend to restore confidence. The first I would allude to are four cases of subcranial hæmorrhage which have recently occurred in Dublin, and for which the operation of trephining was performed. In all four cases the condition was correctly diagnosed, and in three of them the hæmorrhagic effusion was reached and removed, and the treatment followed by immediate relief and ultimate recovery. Two of these cases presented features of exceptional interest. In the first, which was under the care of my colleague, Mr. Thornley Stoker, the patient had sustained a fall off a cart nine days previously to the operation, and was at the time of its performance in a state of complete left hemiplegia, was comatose, and the respiration 12 per minute. The diagnosis which was made, and proved afterwards to be correct, was that hæmorrhage over the right motor area, due to laceration of the middle meningeal artery, and probably associated with fracture, had occurred and produced at first partial left paralysis, and that the increased hemiplegia which subsequently occurred was due

[3] Journal of Anatomy and Physiology, vol. xiii., p. 308.
[4] Brit. Med. Jour., April 21st, 1888.

to renewed hæmorrhage. Trephining was performed over the fissure of Rolando, and the hæmorrhagic effusion reached and successfully removed; this was promptly followed by relief, and an uninterruptedly good recovery was made. The case is of special interest in one particular, being signally illustrative of the doctrine of Ferrier, that the absence of anæsthesia is, in such cases, indicative of the lesion being limited to the motor zone, and the brachial monoplegia also pointed to this alone being implicated. The second case, which was under Mr. Ball's care, was one of motor aphasia, which came on after the patient had received a blow on the head with an open penknife ten days previously to his coming under observation. The cicatrix of the wound was over the squamous portion of the temporal bone. There was an absence of any paralysis of the voluntary muscles, but the aphasia was distinct and progressive, both word-blindness and word-deafness being well marked. Trephining was performed, and the wound was found to have been a penetrating one, involving both bone and dura mater, and a small subdural blood clot was removed, which it was believed was situated in the Sylvian fissure. The recovery in this case was complete. In a third case of subcranial hæmorrhage, which Mr. Thomson has recorded, the operation of trephining and the removal of an epidural blood clot was attended with an equally satisfactory result.

As a remote result of intra-cranial hæmorrhage, another case, which was under the care of Mr. Kendal Franks, is noteworthy. The patient was a young man, aged twenty-five, who commenced to suffer from severe epileptic seizures six years after he sustained a fall on the top of his head from a height of nine feet, and was treated by bromides continued without intermission for over a year, but without influencing the attacks, except occasionally to lengthen the interval between them. Trephining was performed, and a subdural blood cyst pressing on the left frontal lobe of the brain was discovered. The cyst was then cleared out and drained. Immunity from the seizures for three months was the result; there was then a recurrence of them, but they were much slighter than before. A second trephining was then performed, and although the result of this was negative as regards disclosing anything further to cause cerebral disturbance, the condition of the patient since the operation has been most satisfactory, and he is now apparently free from the attacks which formerly were of such frequent occurrence.

In two cases of traumatic cerebral abscess—one epidural and the other subdural, and both of them illustrative of the pathological fact first noticed by Dease as to the late appearance of cerebral trouble after cranial traumatisms—I trephined, and in one of them the result was very remarkable. The operation was performed seven weeks after the injury, which was a blow over the left temple. At the time the operation was performed the patient was clearly *in extremis*—motor and sensory paralysis complete, and coma, following convulsive seizures, profound. On raising a disc of bone at the situation where the injury was received no pus was to be seen, and on laying open the dura mater the result was equally negative. I then passed the needle of a hypodermic syringe into the brain substance as far as it would go, and to my great satisfaction found, on drawing up the piston of the instrument, that I had reached the abscess. I removed an ounce and a half of pus, and then washed out the cavity with a weak carbolic solution. The relief obtained by the evacuation of the abscess was immediate, and before the patient left the operating theatre he was able to articulate distinctly. His recovery was rapid and uninterrupted, and he returned to his usual avocation, which was that of a plasterer. As regards the situation of the trephine opening, I may mention that it was three-quarters of an inch to the left of the mesial line, and an inch in front of the coronal suture. It corresponded to a point close to the junction of the supero- and meso-frontal convolution. After evacuating the contents of the abscess cavity, in order to ascertain the size and direction of the latter I passed the little finger of my left hand cautiously into it. By doing so I was able to ascertain its limitation anteriorly, laterally, and inferiorly. Externally and inferiorly its limitation must have been formed by Broca's lobe; but posteriorly and inferiorly, although I passed my little finger in as far as it was possible, the limit of the cavity was not reached, and my belief is that the abscess possibly involved the lateral ventricle. The final outcome of this remarkable case, if disappointing, is of much interest. For nearly nine months after the operation the patient remained perfectly well, and quite able to follow his usual avocation. It was then stated that he had a "fit," from which he recovered, and he returned on the following day to his work. The morning after this he was found in bed in a state of complete insensibility, and he was then brought for the second time to hospital. Right hemiplegia was complete, and both plantar and patellar reflexes lost; his face was pale, but lips deeply cyanosed. Pulse 160; respiration 60; temperature 101·8°. He had frequent convulsive seizures after he came to hospital. Thinking it possible that these symptoms might be due to the formation of a second abscess, I reflected the flap I made originally at the trephining operation, and, on opening the dura mater, through some thickened cicatrical tissue, gave exit to some bloody serum; I then passed a blunt-pointed director downwards and backwards to a distance of 5 cm., but did not reach any pus or other fluid. A director was then passed downwards and slightly forwards, when a considerable quantity of serous fluid came gushing out. From this situation I removed six drachms of sero-sanguineous fluid dotted with white-coloured flakes. The effect of the operation was to reduce the pulse from 150 to 100, and the temperature from 105·1° to 104·6°. The patient, however, never rallied, and died the day following.

I might dwell on other cases of cerebral abscess illustrative of the beneficial results obtained by trephining and drainage, more particularly that published by Dr. Gowers and Mr. A. Barker, where the abscess occurred in the temporo-sphenoidal lobe and depended on otitis media, and Dr. Greenfield's, which also depended on the same cause. The results of trephining and evacuation in both these cases were attended with the best results. The operative efforts, in cases of abscess, tumours, and epilepsy, of Professor Victor Horsley, Mr. Alexander, Dr. Macewen, Mr. Godlee, and Dr. Roberts of Philadelphia, are such as to give the greatest encouragement and hope that in the near future we may be able to undertake the operative treatment of such cases with a confidence we cannot yet possess.

There are many points of interest connected with these remarkable operative efforts that I have mentioned which, did time permit, I should like to dwell on. But, in truth, the discussion in any minute way of the technicalities of either the diagnosis or therapeusis of such cases seems, on an occasion like the present, hardly appropriate; such being more suitable for consideration at the ordinary meetings of your Society, where, in the scientific crucible the golden ore of experience and research is tested, and the pure metal—that having the genuine ring of truth in it—is elicited and refined. From what has been said, it must be conceded that surgery can no longer hold in any sense the subordinate position to medicine which she occupied so long. So far, at all events, as physical conditions are concerned, surgery has undoubtedly advanced medicine in no small degree, and in doing so accomplished much in the direction of dispelling the factitious and unreasonable division of the two branches of the profession. It has also been its safeguard against irregular and unrecognised lines of practice, for no important surgical proceeding can be based upon such, at least in the public mind. At the same time we must acknowledge that of late years, at all events, surgery is indebted to medicine. From Professor Ferrier's work, for example, brain surgery has to a large extent been the outcome, although without Listerian antisepticism little of what was done could have been accomplished. One of the best instances that could be mentioned of the good results that have been obtained by the combined work of a physician and surgeon is that of Dr. C. Allbutt and Mr. Teale of Leeds, whose researches on scrofulous cervical glands, pulmonary abscess, and other conditions existing on the boundary line—one every day increasing in breadth—between medicine and surgery, are doubtless familiar to all present. In truth, the more investigation is pursued in this direction the more likely is it that surgical possibilities in many other medical cases than those I have mentioned will become recognised. One of the immediate and most salutary consequences of this overlapping or fusion of our work has been the gaining for the profession at large of a vast increase of influence and public confidence; more, it may be safely said, than has been gained by any of the other professions in the same time, and which has been obtained, not because it has mastered so many of the secrets of disease or injury, but, as an eminent living statesman has observed, "because the world was well aware that the very highest of human

abilities were addressed in ample quantity to the business of the profession, and that their abilities were addressed to it with all the zeal and all the judgment which they could expect from human capacity and assiduity in any of the pursuits of life." And now, what next? Are we on the threshold of unexplored regions of research, or have we arrived at the hopeless deadlock of finality that some maintain we have reached? We should reject so disheartening a suggestion, and fearlessly pursue our course, relying not alone on biological research, but also on improvement in surgical precision and of surgery, more particularly in its operative aspects.

As regards the future progress and development of medicine, it has been said by an eminent scientist, but I think unphilosophically, that present research forces on us the conclusion that in order to appreciate the etiology and prevention of disease we must in future rely rather on chemical than on biological investigation; but, considering, among other things, the results obtained by the recognition of parasiticism as an etiological factor in the production of disease, and the great probability of being able in the near future to recognise it as such in affections in which it has not yet been demonstrated, it is clear that we must not rely exclusively on either one or other of them, but rather to the outcome of researches in the many branches of natural science on which both medicine and surgery are based. But there are other things we should do as well as not do. Among the latter we should not yield to the tendency that exists in the present day to abandon the principle of unity of research, and to run into narrow specialistic grooves of work. In certain branches of surgery and medicine, just as in law and other departments of human learning, specialism is doubtless not only inevitable but useful, but it is when there is undue extension of the principle that the harm is effected, leading, as it doubtless does, to what has been so well termed by Dr. Richardson a "centrifugal disintegration"—one which is tending to tear our science into shreds. It has been said by the apologists of specialism that what it loses in breadth it gains in depth; but it should be remembered that it is not always the deepest wells that furnish the clearest and best water, nor in mining operations is it the narrowest shafts that always lead to the purest metal.

Another error that is too often made, and which is fraught with peril to true advancement in surgery especially, is the premature publication of cases, and the danger that exists in consequence of drawing erroneous conclusions therefrom. In illustration of this, I would allude, among many other examples that might be mentioned, to the records that have appeared so often of alleged successful results obtained after operations for lingual cancer. It must be admitted by all possessing operative experience that there are few surgical procedures that, as a rule, in their ultimate results are so disappointing as these. This disease seems, in truth, like an impregnable fortress, for ever proof against the sternest artillery of our art, an invulnerable enemy that apparently may be vanquished but never conquered. To those who give unquestioning credence to the roseate statistics so frequently published of the treatment of cases of lingual cancer—cases in which permanent relief is too often triumphantly stated to have been obtained—this may, perhaps, appear too discouraging a picture; but these published results are, as a rule, so distinctly opposed to my clinical experience, that on reading the records alluded to, in which success appears to be the rule, and the want of it the exception, it is hard to avoid surprise and regret that so many have been found to prematurely publish records which, my belief is, are of necessity misleading. The custom of too early publication of such cases is the main factor in preventing a true estimate being formed of the value of such interference, and must tend to damage the worth of statistics as a means of establishing surgical truth. In reference to this point Sir James Paget's words are very applicable. He observes, speaking of what good operative surgery may do when practised with prudence in the treatment of malignant disease: "It does not do all we want; the disease returns even after complete removal of the diseased parts. All that is locally wrong may be removed, the local portion of the disease may be deemed cured, but something remains, or after a time is renewed, and similar disease reappears, and in some form or degree is usually worse than the first, and always tending towards death."[5]

I hope I shall not, in making these observations, be understood as in any way depreciating operative surgery in such cases. Far from it. It sometimes cures, usually prolongs life, at all times gives relief; but in reference to cancer and its treatment, it must, I fear, be confessed that as yet "we see through a glass darkly." We have only reached a sort of halfway house on the road, beyond which we are not likely to get until many of the problems connected with the disease are elucidated: such as the relations, if any, which exist between it and other specific diseases, notably syphilis; how far we are justified in regarding it as primarily a local disease; the nature of the *materies morbi* or microbe, or whatever is the agency that develops the phenomena of cancer; and, again, if the disease has a parasitic origin—and probabilities seem to point in that direction,—to determine what are the circumstances which at one time render the organisms quiescent, dormant, and apparently harmless, and at another time which rouse them into dangerous activity. These, as well as many other problems, must be solved before the therapeusis of cancer can be placed on a sure and scientific basis. In connexion with the all-important question of the origin of cancer, it has often occurred to me as remarkable that the question as to what part syphilis takes in its development has not been more frequently a subject of consideration. I confess to a growing conviction, based on a tolerably long clinical experience, that in the early life history of cancer it is not so much a direct etiological factor, so to say, but rather tends to promote a condition favourable to the development of the entity, whatever it may eventually prove to be, which plays so important a *rôle* in the first act of a drama which, as a rule, has so tragical a termination. Recently Professor Lang of Vienna has drawn attention to this subject, and has given the particulars of a series of cases which illustrated the tendency to the development of carcinoma on a syphilitic base, and he alluded to similar cases recorded by Mr. J. Hutchinson and Professor V. Langenbeck. My colleague, Professor Hamilton, has also detailed to me the history of two remarkable cases which were signally illustrative of the development of cancer occurring during the treatment for secondary syphilis, the disease appearing in the groin and running a rapidly fatal course. Did time permit, I could also adduce instances illustrating the close affinity between the two diseases. I allude more particularly to cases of ulcerated lingual gummata, which ultimately presented the characters, clinical as well as histological, of epithelioma. In reference to this subject Mr. Hutchinson observes: "The statistics are wholly wanting as yet which would enable us to give any confident opinion as to whether the damage the tissues receive from a syphilitic infection makes them more prone than before to take in the erratic modes of growth which constitute cancer. In the case of the tongue, the association of the two is so common that it is difficult to avoid an impression that syphilis must exercise some degree of predisposing influence."[6] Mr. C. Heath also is of opinion that one of the causes of the increase of cancer of late years—a fact noted by the Registrar-General—is the greater spread of syphilis.[7] If these views be ultimately endorsed—and who in the present state of our knowledge can say they cannot?—how largely does it add to the imperative duty that devolves on us to make, with all the powers at our disposal, efforts to dissipate the public prejudice that exists to bringing about a re-enactment of, I trust, the temporarily laid aside Contagious Diseases Acts, and how greatly does it intensify the grave responsibilities of all who unhappily, under the baneful influence of that mischievous sentimentalism which has done so much to sap the judgment and good sense of so many men as well as women, thwart and hinder efforts which, when made, have been proved to all unprejudiced persons to be fraught with good to mankind, not merely now, but for untold ages to come.

The elimination of this dread scourge of the human race is not a national, it is a cosmopolitan question. It is one not so much for the therapeutist as for the statesman. "The time has come," says Marion Sims, "when we can no longer shut our eyes to its evil influences, and we must deal with it plainly, as we deal with other great evils that affect the general health of the people. If yellow fever threatens to invade our precincts, we take steps to arrest its progress at once. If cholera sounds the alarm, we immediately prepare to defend ourselves against its ravages. If small-pox infects our borders, we circumvent and extinguish it. But a greater scourge than yellow fever and cholera and small-

[5] Cancer and Cancerous Diseases, p. 25.

[6] Syphilis. By J. Hutchinson. 1887. [7] Brit. Med. Jour., April, 1888.

pox combined is quietly installed in our midst, sapping the foundations of society, poisoning the sources of life, rendering existence miserable, and deteriorating the whole human family."

I might adduce much and to unprejudiced minds conclusive, evidence as to the beneficial effects of the Acts in protected districts, not only as regards the diminution of the disease, but also in reference to the good moral effects of them, but on the present occasion I will, in connexion with the former, content myself by mentioning one fact. It is mentioned in an able paper on this subject by my colleague, Mr. W. Thomson.[8] In 1874 the 50th Regiment came to Dublin, an unprotected station. It was previously for seven months at Aldershot and Colchester, protected stations. The length of time was practically the same that the regiment spent in both the protected and unprotected stations, as was also the average strength of the regiment during the two periods. The admissions per 1000 men, while protected, for syphilis was 11·97, and while unprotected 118·81; and it should also be stated that during the first period there was the adverse influence of 13 per cent. fresh recruits, while there were no enlistments in the second. Other facts equally striking could be mentioned proving how potent for good the Acts might be made; but the one I have adduced speaks, in my opinion, trumpet-tongued in their favour.

But encouraging as the results of the Acts have been, it is not from such partial legislation as that contained in them that we can look for any great or permanent improvement. This need not be expected until statesmen and philanthropists of all nationalities shall combine in endeavouring to crush the enemy in our midst, that every day brings in its train disease, destitution, and death, not alone to the guilty but also to the guiltless, and transmits a bitter inheritance of sorrow and suffering to the innocent yet unborn. And yet to the efforts made to mitigate or stamp out the disease the strongest opposition is made by those "friends of humanity," whose perverted notions of right and religion make them give an insensate opposition to a movement which if carried out effectively would put such a check on immorality and diminish so largely disease among all mankind. When we consider the suffering, blighted hopes, and loss of life that the disease unchecked carries in its wake, we cannot but realise the fact that although sentiment is a mercy, it may be one that for a nation is the most costly, and for humanity the most cruel.

The task of dissipating many of these prejudices and errors of persons of doubtless good intention as a rule, but of weak intellectual fibre, and which in more than one instance have culminated into what has become a real calamity for mankind, is one that all can undertake, no matter what their abilities or mental powers may be. If it be not possible to have a position in the scientific vanguard of our profession, much may be done in supplementing the work of those whose strength and whose work have enabled them to get there. Men of much creative genius are, as they ever have been, rare in their generation. But those without this may not the less be "true sons of their century," for it is the men of order, the men who work with method, earnestness, and truth, that do the great mass of the world's work. If they have not strength to carry a votive tablet to the Temple of Truth, they can, at all events, assist in fixing and cementing it; and fortunate it is that such is the arrangement made by the One Perfect Workman, for it shows us the importance—nay, necessity—of mutual help, which must exist so long as men's qualities, mental powers, and tastes are so diverse.

In future, the relations between surgery and medicine being now so happily altered, the physician and surgeon will work in unison, the labours of the one supplementing those of the other, their mutual jealousies and differences forgotten, or relegated to the hazy traditions of a past, that has but little interest to anyone, save perhaps the historian or the antiquary. This union for the good purposes of mutual help will bring us increase of strength, of confidence, and hope, and assuredly prove that we are all, so to say, of the same guild, all animated by the same worthy ambition, by the same desire to "allow," as Lord Bacon said, "the spials and intelligencers of Nature to bring in their bills," and all animated by the same fair aspiration to discover, collect, and replace the scattered fragments of that precious crystal of Truth, which, it has been said, fell from, and was given to us from, Heaven.

[8] Med. Press and Circ., April 30th, 1879.

ON THE FUNCTIONS OF THE SINUSES OF VALSALVA AND AURICULAR APPENDICES;

WITH SOME REMARKS ON THE MECHANISM OF THE HEART AND PULSE.[1]

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IN this paper I propose first to make a few remarks on the functions or uses of the sinuses of Valsalva. Any elaborate description from me of these sinuses is unnecessary. Suffice it to say that they are three pouches or bulgings at the root of the aorta and pulmonary arteries, placed exactly opposite the three semilunar valves, one for each. I would add, further, that these pouches are a constant feature of all mammalian and avian hearts. As far as I have been able to ascertain, up to this no particular use or function has been ascribed to these pouches; but, on the contrary, they are looked upon as pathological formations. I think we are justified in looking upon Professor Michael Foster as the latest and best authority on this subject, and upon what is contained in his standard work on Physiology as an embodiment of all that is known upon the subject. In his work appears the following statement: "When a stream of blood flowing in a closed channel is suddenly cut off, a back current is induced in the periphery of the central stream, and this back current in the aorta and pulmonary arteries closes the semilunar valves, and, being arrested by the valve pouches, expends its energy in bulging the arterial walls opposite these pouches." In support of this notion, it is stated that these bulgings are not evident till late in fœtal life, and from this it is argued that their subsequent appearance is due to the gradual mechanical force of the back current of the blood, which is said to close up the semilunar valves. Put into other words, the above statement amounts to this—that "the sinuses of Valsalva are mere pathological formations, and as such have no definite or pre-arranged functions." Not being able to see the force of these arguments, I was always very unwilling to accept this explanation of the existence of the sinuses, since there occurred to me no parallel between the sudden closure of a stopcock in a tube and the systolic injection of blood into the aorta.[2] In fact, I could never understand the *raison d'être* of this back current. On the contrary, I would submit that not only is there no such back current, but also that these sinuses are not pathological formations, and, as a matter of fact, have very distinct and important functions to perform, so much so that their presence is absolutely essential to the mechanism of the propulsive power of the heart. In the first place, in answer to the argument that these pouches are not formed till late in fœtal life, I would point out that up to that time the semilunar valves are advantageously imperfect, one of them being always very much smaller than the other two, and that provision is thus made for regurgitation in case of over-tension in the arteries. The rapid rate of the contractions of the fœtal heart is sufficient to maintain the circulation in the face of undeveloped valves. I submit that there is no evidence of the possible existence of such thing as a reflex current tending to close the semilunar valves. The blood in the aorta is always under considerable pressure, and the walls of that vessel are always in a state of tension. Fluid pressure being equal in all directions, the unit of pressure on the interior of the aorta, on the upper surfaces of the valves, and on the cross section of the aortic contents at a certain distance from the valves is the same. Now when the ventricle contracts it throws its contents with considerable energy into the aorta, and so increases the tension of that part of the vessel nearest the heart. The energy of the ventricle is expended partly on raising the semilunar valves, and partly on thrusting into the aorta, already under considerable pressure, an additional quantity of blood. This additional quantity of blood occupies the centre of the lumen of the first few inches of the aorta, and thrusts aside the previous contents in all directions, forwards, backwards, and sideways, thus tending to close the valves

[1] Extract from a paper read before the Royal Society and the Anatomical Society.

(so increasing the opposition to the ventricles), dilating the first part of the aorta, and pushing forward the main column of blood in this vessel. Now, as the area of the cross section of blood in the aorta is small as compared with the surface area of the interior of the first few inches of the aorta, the chief part of the force of the ventricle will be expended in dilating this vessel, and only a relatively small amount will be available for pushing forward the main column of blood. As the force required to push forward the main column of blood and cause a general dilatation of the arterial system would be enormous, it is perfectly certain that this forward impulse of the ventricle is absolutely inefficient for this purpose. It will be thus seen that the suddenness of the injection by the ventricle only applies to the first part of its contraction, and towards the end the pressure backwards on the valves is almost equal to the force of the ventricle, and the last drops of blood must enter the aorta with a very small momentum and occupy the neighbourhood of the corpora Arantii. Under these circumstances the valves are nearly closed towards the end of the systole, and consequently there can be no sudden closure of the semilunar valves, neither then is a peripheral back current possible. The aorta, being distended, recovers itself by virtue of its power of elastic recoil, so distending another section of the tube, and so on to the smaller arteries. I submit that the sinuses of Valsalva prevent the semilunar valves from ever during life touching the walls of the aorta or pulmonary arteries, and so provide against the possibility of complete incompetence. Were the valves at any time during life to come in contact with and line these sinuses, the pressure of the blood on the aorta would exert itself on the under instead of the upper surfaces, so retaining them in these pouches and throwing the whole force of the arterial system on the interior of the ventricle, causing speedy dilatation and arrest of the heart. The sinuses of Valsalva, then, I consider to be absolutely essential to the mechanism of the propulsive power of the heart. In the ventricles the musculi papillares serve the same purpose as the sinuses of Valsalva, for by their contraction the mitral and tricuspid valves are drawn away from and prevented from becoming flattened on the interior of the ventricles, and so rendered incompetent.

The Auricular Appendices.—From the careful and direct observation of a large number of hearts in action, I am able to state that complete contraction and emptying of the auricle, as a whole, never takes place. The only portion of the auricle that contracts vigorously and sensibly is the auricular appendix. This appendix at each revolution of the heart empties itself completely. By contraction of the auricular appendix sufficient blood is driven into the ventricle to complete its distension without increasing the general tension in the auricle or impeding the flow in the large veins. The auricular appendix is situated like a dome or bell glass over each auriculo-ventricular opening, and in contracting exactly resembles a medusa when swimming. By its cone-like form the fluid in its cavity is driven into the ventricle without disturbing the surrounding blood. The ventricle being nearly full from the direct flow into it from the auricle, the auricular appendix completes its distension. If any further proof than direct observation is necessary in support of the statement that the auricle, as a whole, does not contract—more than, perhaps, to a very limited extent,—let us suppose, for argument's sake, that it does contract forcibly, so as to expel its contents. It is well known to anatomists that there are valves at the junction of the internal jugular and subclavian veins, and also at the junction of the external jugular and subclavian; also that there are no valves at the opening of the inferior vena cava into the auricle or in the hepatic veins. Possibly it may not be so well known that the valves in the large veins are only competent during moderate distension of these vessels, and that injection will pass from below upwards into the sinuses of the dura mater. Such being the case, were the auricle to contract with any appreciable force, a pulsation and periodic arrest of flow would undoubtedly be produced in the large veins at the root of the neck, in the sinuses of the brain, and also in the liver. Cases of tricuspid regurgitation fully support this statement.

Mechanism of the Heart.—In studying the mechanism of the heart, too much stress cannot be laid on the fact that sudden and extensive movements of the valves are quite impossible. The valves are in absolutely closed cavities full of blood, having blood or the solid tissues of the heart on either side, and it is manifestly impossible for the flapping action described in many physiological text-books to take place. It appears to me that the sequence of events in each cardiac systole is as follows. On contraction of the ventricle, the first effect is the drawing away of the tricuspid and mitral valves from the ventricular wall by means of the musculi papillares. During this time the auricle is more or less full, and blood is collecting in the great veins. The valves come together more or less slowly, for it is impossible in a fluid medium like the blood to move broad structures like these valves suddenly, except by considerable force, and then with the result of producing a back movement and shock to the whole contents of the auricle. I would submit that the mere fact of the auricle being distended with blood renders it absolutely impossible for the tricuspid and mitral valves to close suddenly and vibrate. Vibrations of a thin membrane suspended in a dense fluid under considerable pressure are quite out of the question. It thus appears that the first sound of the heart is in no way formed or influenced by the closure of the tricuspid and mitral valves. The closure of the auriculo-ventricular orifices being the first result by a continuance of contraction, the contents of the ventricles are subjected to a considerable pressure. The contraction of the ventricles, commencing in the musculi papillares, passes out at the apex and spreads towards the base. As the tension in the ventricle increases the more muscular tissue is brought into action. This is provided for in the arrangement of the layers in the wall of the heart. When the tension in the ventricle equals that in the aorta no movement of the valves takes place, the pressure on both sides being equal. At the moment when the tension in the ventricle exceeds that in the aorta the valves commence to move up and blood to enter. As the blood enters the aorta so the opposition to the action of the ventricle increases. From the moment the blood enters the aorta there is a gradually increasing opposition to the action of the ventricle, and consequently a gradually increasing action of the ventricular walls to overcome this. The contents of the ventricle are thrust into the centre of the lumen of the aorta, pushing aside the previous contents forwards, backwards, and sideways, so distending the first part of the aorta, opposing the upward movement of the valves, and tending to move forwards the main column of blood, as previously explained. From this it is perfectly evident that as the force of the ventricle increases, so the opposition to overcome increases, and that the last few drops of blood which enter the aorta do so under very great pressure, with a very small momentum and with nearly closed valves, and that these very last drops must occupy the upper aspect of the corpora Arantii. From this point of view, therefore, it is clear that the second sound of the heart cannot be due to the sudden closure of the semilunar valves. At the end of systole of the ventricle the tension in the aorta and in the ventricle are again equal and are at a maximum. Consequently the pressure on both sides of the valves is again equal. At the moment of commencing diastole the support below is at a minimum, and the valves, being subject to a sudden momentary strain, vibrate just as a handkerchief when suddenly stretched laterally will give out a short sharp sound. The vibration is short and sharp, being soon arrested by the damping action of the inflowing blood from the auricle. This short sharp vibration, due to the difference in pressure on the two surfaces of the semilunar valves at the commencement of diastole of the ventricle, seems to be the cause of the second sound of the heart.

(To be concluded.)

NOTES OF TWO CASES OF TROPICAL LIVER ABSCESS; ANTISEPTIC INCISION AND DRAINAGE; RECOVERY.

BY SURGEON-MAJOR W. F. STEVENSON, M.S.

CASE 1.—W. H——, private in the Manchester Regiment, aged twenty-four, who had been in India for a period of four years, was admitted into Kasauli Station Hospital, on May 24th, 1887, for hepatitis. He had never had syphilis or dysentery, and had not been a hard drinker. On admission the liver was found to be enlarged downwards, extending about two inches and a half below the ribs. The temperature varied from 99° to 101°. There were loss of appetite

and furred tongue, and the bowels were constipated. A little to the right of the ensiform cartilage, and about an inch below the ribs, there was a distinct tumour to be seen, a bulging forward of the abdominal wall, about two inches across, and raised above the surrounding skin by about half an inch; this was extremely tender to the touch, and the skin over it was œdematous, but not red; there was no fluctuation to be felt. He was treated by saline laxatives, and afterwards chloride of ammonium mixture; fomentations were also applied. On May 29th the needle of a hypodermic syringe was passed into the tumour for diagnostic purposes, and a syringeful of creamy pus removed. As the result of this, the pain and tenderness almost completely disappeared, the temperature went down to normal, and his general health greatly improved; appetite good, bowels regular. On June 4th six ounces of thick pus, in which there were no shreds, were removed by means of an aspirator, the needle and the skin having been previously purified with 1 in 20 carbolic lotion. The puncture was closed by a small piece of carbolised absorbent wool and collodion. The temperature remained normal. On June 8th, under chloroform, and with the usual antiseptic precautions, an incision an inch and a half long, parallel to the last rib, and the middle of which was over the centre of the tumour, was made into the liver substance, and three ounces of pus given exit to. Two small drainage tubes were inserted, and the wound dressed with iodoform and a large pad of absorbent carbolised wool. A probe measured the depth of the abscess at about three inches and a half. The same evening the temperature was normal, and next morning it was 97·6°. The wound was dressed as before; the discharge was slight and there was no pain. Detailed notes of the case after this date are unnecessary. The man's general health steadily improved, and he gained weight rapidly. The abscess cavity, which after the second day was syringed out with warm iodised water (a drachm of the tincture to eight ounces of water), gradually contracted, so, that by July 10th the shortened tubes could no longer be kept in, and by July 15th (fifty-third day) the wound had completely healed.

CASE 2.—Lance Corporal J. R——, 1st Border Regiment, aged twenty-four, who had been in India for a year and eight months, was admitted into Kasauli Station Hospital on Sept. 1st, 1887, for severe hepatitis. He had had remittent fever in May, 1886, and ague followed by hepatitis early in 1887. He had never had dysentery, and was not a hard drinker. He had been in the Hills during almost his entire Indian service. Since his discharge from hospital in March, 1887, in fairly good health, after his recovery from the hepatitis, he had been employed in the orderly room as clerk, and he had continued at his work as long as he could manage to do it, and no doubt he had been ill for some considerable time before he reported sick. When admitted he had the appearance of being extremely ill. He was anæmic-looking and greatly emaciated. The liver dulness extended from the nipple level to two inches below the ribs; the abdomen generally was somewhat distended; the bowels were loose, and the tongue furred. There was a general bulging of the side over the hepatic region, with tenderness on pressure, and pain of a dull character in the right shoulder. He had had rigors, or, as he called them, "ague." His temperature varied from 99° to 100°; he had night sweats and complete loss of appetite. He slept badly. There was no cough. He was ordered turpentine fomentations over the abdomen, and to have the chloride of ammonium mixture. The looseness of the bowels was treated, when excessive, by dilute sulphuric acid and opium; he was ordered twenty grains each of chloral and bromide of potassium at night; his diet was principally beef-tea and milk; and brandy to the amount of four ounces was considered absolutely necessary for him in his very low condition. By Sept. 8th he felt better; the pains over the liver and in the shoulder were less; his temperature was normal for the first time since admission; and he had no diarrhœa. On the evening of the 9th he was again very ill; the pain was excessive, and the temperature 101·2°. The pain was relieved by turpentine fomentations and morphine draughts. Two attempts to find pus by means of the hypodermic syringe at situations below the ribs failed. On the 14th, the pain in the liver being again extreme, the small needle of the aspirator was inserted into the liver below the last rib, and four ounces of dark-coloured blood were withdrawn. On the next morning he felt a good deal easier, and had passed a better night. Temperature 101°; pulse weak (96); emaciation steadily increasing. On the 18th he said he felt better, but the temperature during the previous few days had been higher—from 100° to 102°. Between this date and Oct. 15th he steadily lost ground; he ate but little and slept badly; emaciation and weakness had become most marked; he had occasional attacks of diarrhœa; the severity of the liver pain varied; the temperature ranged from 100° to 102°. The side and ribs bulged generally, but there was no pointing of matter, or tender or œdematous spot. On Oct. 15th the large needle of the aspirator was passed into the liver through the eighth interspace a little behind the nipple line, and pus reached at a depth of two inches from the surface; forty-two ounces of pus mixed with blood, and containing shreds of necrosed liver substance, were removed. The temperature at the time of the aspiration was 101°; in the evening it was 96°, and next morning it was 99°. He had no pain, but he was extremely weak and ill, and it was with great difficulty that he could be got to take his nourishment and stimulants. On Oct. 17th, he was very low; temperature 101·6°. No discharge had taken place from the needle puncture. On the 22nd the abscess had refilled, and the man's prostration had increased. There being no other medical officer in the station, and a consultation being difficult to obtain, I did not consider myself justified in administering an anæsthetic and doing the usual operation unassisted. The abscess was therefore tapped by means of a large trocar and cannula, the latter being left in to act as a drainage tube. About twenty-two ounces of dark-coloured pus, not containing shreds, were removed, and a large quantity continued to ooze out; iodoform and carbolised wool were used as dressing. On the 23rd the dressings had to be frequently changed in consequence of the amount of discharge. On the previous evening the temperature was 97·8°; it had now reached 100°. The pulse was stronger. He had taken his nourishment fairly well. There were signs of jaundice. The discharge flowed freely through the cannula until the evening of the 24th, when it ceased, and on removing the dressings it was found that the cannula had slipped out. A larger trocar and cannula were passed in at the same spot and in exactly the same direction, but no pus flowed. Temperature 100·4°. On the 26th, after consultation with Surgeon-Major Flood Murray, I.M.D., it was decided that immediate operation was the only procedure from which any possible chance of the patient's life could eventuate. Chloroform was therefore given, and an incision about two inches long was made between the eighth and ninth ribs, giving exit to thirty-six ounces of pus, and the largest size drainage tube put in. Iodoform was dredged over the wound and the surrounding skin, and a large pad of carbolised absorbent wool bandaged on. At the completion of the operation the man was very low, the pulse was just perceptible, and the surface was cold; but by the administration of brandy, and the use of hot bottles placed in bed with him, he soon rallied, except that his voice was whispering for some days. The amount of discharge which occurred during the day was very great, and the dressings had to be frequently changed. He was much troubled during the first twenty-four hours by a slight but frequent irritative cough, which prevented sleep. On the 29th a change apparently for the better had taken place; he looked better in the face and was stronger; the discharge was very profuse. The abscess cavity had been washed out on the previous evening with warm iodised water injected through a narrow drainage tube until it returned clear. He took his nourishment well. The pulse was fairly strong; temperature 98°; bowels confined. He was ordered "white mixture." On Nov. 1st he had gained strength, but continued to emaciate, and his expression of face was not so good as it was two days previously. The discharge was not lessening. The abscess cavity was washed out twice a day. On the 3rd the discharge was much less, and he was gaining strength, but he perspired a good deal during sleep. He was given atropine and morphine pill at bedtime. The jaundice was marked. Temperature 98°. On the 18th he was very distinctly better in every way, the discharge was not great, and he was not so extremely emaciated. By the 24th he was very much better. He was gaining strength and flesh rapidly, and the discharge was steadily decreasing. The abscess cavity had greatly contracted. Improvement continued uninterruptedly, and on Dec. 26th the case-book reports him as "looking in excellent health; a sinus about one inch long remains; a tube can no longer be kept in, but a short slip of oiled lint is put in once a day." There was then no jaundice. On Jan. 5th,

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1888, the sinus showing no disposition to heal, it was filled with a 4 per cent. solution of cocaine and laid open, the wound being stuffed with lint wet with carbolised oil. This wound had healed in about three weeks, and at this time the man looked strong and fat and well in every respect. The liver dulness still extended below the ribs, but there was no increase in its area towards the nipple.

Remarks.—The case of W. H—— presented no difficulty. The abscess was small, close to the surface below the ribs, and made itself distinctly visible; there was no difficulty in finding it, and the necessary treatment was very evident. But that of J. R—— was different. The man was so ill when he came to the hospital, and so long a time had elapsed before the situation of the abscess could be ascertained, in consequence of failure of many attempts in this direction, that when the necessary operation had to be performed he had become reduced to an extreme condition of prostration and emaciation—so much so that Dr. Murray and I decided for the operation, not in any expectation that he would recover if it were done, but knowing full well that he must die if it were not done. I have seen many liver abscesses in this country, but never recovery from one as large as this; forty-two ounces of pus were removed by the aspirator, but the cavity was certainly not emptied then. The long bullet pouch, allowed to slide in by its own weight, measured the depth at seven inches. On many occasions large portions of necrosed liver substance were coughed out through the tube at the time of dressing, and when the wound was uncovered the air was drawn in and out of the large cavity with a loud whistling sound, exactly as is seen in a case of empyema after operation. During the later weeks of the treatment of the case a tracheotomy tube had to be used in the outer end of the drainage tube in order to prevent the ribs coming together and closing it; it acted well for this purpose, no necrosis of rib occurring in consequence. A hypodermic syringe, with a needle a little longer than those usually supplied with the instrument, is an excellent means of "prospecting" for pus in these cases. It does no harm, and it is usually quite long enough to reach matter unless very deeply placed. It failed in this instance only because it was not entered in the proper situation, not because it was unsuitable. Aspiration alone is quite inadequate for cure in these cases. In former years I have seen it tried, but I have never seen recovery take place where free drainage was not secured. Washing out the cavity once or twice daily with a warm, mildly antiseptic solution until it returns clear is an important item in the treatment. Both these men were sent to England for change of climate.

TWO CASES OF HYSTERIA IN BOYS.[1]

By DAVID B. LEES, M.D., F.R.C.P.,
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LAST April I saw, in consultation with Dr. Berry of Watford, a boy of eight years suffering from symptoms which Dr. Berry had already diagnosed as hysterical. He belonged to a family of strongly marked neurotic disposition, and had always been considered peculiar and strange in his manners, subject to groundless alarms, apt to cry without cause, and full of obstinate whims. His present illness had lasted a month. It commenced three weeks after his removal from a girls' school to one for boys only. His first symptom was constipation. Then came vague complaints of pain, which could not be localised. After a while he said that he was unable to walk, and it was observed that his legs were stiff. His appetite became very capricious: one day he refused all food except biscuits; another day he would take nothing but cocoa; and on a third occasion he insisted on a large supply of eggs. His tongue having become furred, and vomiting having followed these vagaries, Dr. Berry had forbidden him his favourite cocoa, whereupon he made the discovery that he was unable to swallow at all. Meantime his urine and his temperature had remained normal. The stiffness of his legs was found not to persist when he was asleep; and, indeed, it was not always present when he was awake, for one evening it was observed that, when he was lifted on to the commode, he was able to sit, and his legs hung down. One day, his aunt, a lady of great intelligence and common sense, thought she would try an experiment to test his asserted inability to walk, so she placed a shilling on the mantelpiece on the opposite side of the room, told him that he might have it if he could get it, and went out. In a very few minutes she returned, and found him in happy possession of the shilling. On the day of my visit he was in bed, lying flat on his back, with his lower limbs extended rather stiffly, and spasmodically adducted. He said he could not draw them up. When told to try, there was some additional contraction visible in the quadriceps femoris on each side, but that was all. The limbs were not at all wasted, and he could feel the prick of a pin everywhere over them. On pressing either patella downwards, a tap caused a sharp contraction of the quadriceps. The plantar, cremasteric, abdominal, and epigastric reflexes were normal. The abdomen bore handling well; some fæcal lumps could be felt in the sigmoid flexure. He had never passed urine in bed. The heart and lungs were normal. The upper limbs were not stiff; the grasp of the two hands was equal and rather feeble. The pupils were normal, and there was no strabismus and no facial paralysis. When I tried to examine his eyes he screwed them up tightly. I insisted that he should take some milk, and as he declared that he could not do so, I raised his head on my knee, poured some milk into his mouth, and compressed his nostrils. He made as much resistance as possible with teeth and tongue, but finally was compelled to swallow some, and, with a look in his eyes which plainly said "I am afraid you really mean it," at last got down a large cupful. While engaged in this forcible feeding I noticed that the muscles of his neck and back were quite stiff; but this passed off immediately that he was replaced in the supine position, and not the slightest stiffness could then be felt in them. Nothing abnormal was detected in the spinal column. There was no difficulty in confirming Dr. Berry's diagnosis of hysteria, and we agreed that the treatment necessary was mainly moral. We insisted that he should be compelled to take proper food with regularity, that a deaf ear should be turned to his complaints, and that he should be encouraged to exert himself, and not allowed to see his brothers and sisters until he walked out of the room. We urged that his mother should temporarily give up the care of him to his aunt; and although we were not successful in this, yet his mother took to heart the advice given, and treated her son with firmness. The result was soon seen. He began to take his food well. In a fortnight the stiffness of his legs had quite vanished, and within three weeks he was propelling himself round the garden on a tricycle. He soon returned to school, and has not had any recurrence of his hysterical symptoms.

The second case is one of a very different type. Walter T——, a boy aged eleven, came among my out-patients at St. Mary's Hospital last autumn, complaining of severe constant headache. He was a pale, rather thin boy, with a bright intelligent expression, always coming alone, and never varying in his account of himself. The headache was so severe as to excite a suspicion that he might be the subject of some cerebral disease, such as tumour or abscess. He improved after taking iodide and bromide of potassium, but did not entirely lose his headache. Light was thrown upon the true nature of the case by the discovery that he had an anæsthetic area on his left cheek, and other similar areas on his trunk and limbs. He had also amblyopia of his right eye, but this, he said, had existed as long as he could remember. In December he came again, and I then found that sensation on the left cheek was quite normal, but that the right cheek was anæsthetic. Sensory power was deficient on the right hand, good on the left. The right eye was still amblyopic. How it was that I omitted to examine it with the ophthalmoscope I cannot say, but I presume it must have been owing to the press of work in the out-patient department. But I investigated the condition of his other special senses, and found that his hearing was distinctly defective on the right side, for a watch which could be heard on the left at a distance of three feet was inaudible on the right beyond one foot. I tested also his taste and smell, but could not arrive at any decided opinion as to any deficiency in them. Two months later (Feb. 16th) I noted that there was anæsthesia, analgesia (tested by a pin), and loss of sensation of temperature over the right cheek, right side of the face and neck, right upper and lower

[1] Read before the Harveian Society of London.

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limbs, and the upper and lower thirds of the right side of the trunk, but that a sensitive zone existed round the middle of the right side of the body. My next note is dated April 6th, and shows a second transference of the anæsthesia. It was now the left cheek and the back of the left hand that were anæsthetic, while the right cheek had quite recovered its sensibility. He still suffered much from headache. On testing his vision a little more carefully, I found that not only was the right eye (as formerly) amblyopic to a very high degree, but that hemianopia was present in the left eye, for with this eye he could see objects to his left, but not those to his right; that is, he had in this eye nasal hemianopia. On making this discovery I asked my colleague, Mr. Silcock, to examine the boy's eyes. Mr. Silcock verified the observations already narrated, but he discovered in addition some interesting facts with regard to the right eye. In the first place, he found that posterior polar cataract existed in this eye, also some hypermetropia and slight internal strabismus, but he did not think that these abnormalities taken together would suffice to account for the high degree of amblyopia, which reduced vision in this eye to mere perception of light. In addition to this, however, Mr. Silcock found that light reflected from a mirror and thrown upon the right retina was recognised by its nasal half, but was quite invisible to its temporal half. Thus the boy had, on this particular day at all events, double nasal hemianopia, which is the rarest of all forms of hemianopia; and this fact is especially worth noting, for Dr. Gowers[2] says: "It is doubtful whether hemiopia is ever of hysterical origin. ..... Of a large number of cases of which I have notes, there is only one which I think may have been hysterical." We tested his hearing at the same time, and found that it was distinctly defective on the right side, the watch being audible at a distance of two feet from the left ear, but at not more than six inches from the right. I tried the effect of a Politzer's inflation, but the condition remained unaltered. These interesting phenomena were of short duration. Mr. Silcock requested the boy to come the next day to Moorfields for further investigation. He did so, and it was found that the hemianopia had completely vanished! I saw him again two days later (April 9th), and found that it had not returned, and not only so, but that the anæsthesia of the left hand and the defective hearing in the right ear had vanished also. He could now hear with the right ear as well as with the left, and felt a pin prick on his left hand at once. Some anæsthesia, however, remained over his left cheek. On examining the interior of his mouth, I found that he was sensitive on the mucous membrane of the left cheek, but not on the left side of the dorsum of the tongue. The last note I have of his case is dated May 18th. His headache was then nearly well. There had been a further change in the distribution of the anæsthesia, which now existed (though only to a slight extent) on the right cheek, while the skin of the left cheek was once more of normal sensibility. The amblyopia of the right eye continued.

No doubt these two cases must both be classed as "hysterical," and yet how completely they differed from each other! In the first the affection was mainly a moral one, and the objective symptoms were purely motor; in the second, there was no moral element, and the symptoms belonged entirely to the sensory sphere. The one boy was perverse, obstinate, whimsical, and exaggerated his symptoms to the utmost; the other was intelligent, quiet, patient, and complained of nothing but headache; all his symptoms (even including the amblyopia) having been discovered simply by clinical investigation. Yet may not these differences be due simply to the portions of the brain affected in the two cases? They are hardly more diverse than the symptoms which result from a lesion localised in the anterior two-thirds of the posterior segment of the internal capsule are from those which result from a similar lesion limited to the posterior third of the same structure. Is it not possible that in both cases there was the same kind of affection of the cerebral cortex—a kind of torpidity of the nervous centres, only influencing different areas? If so, it would be right to class them both under the same heading. But the occurrence of such cases in the male sex shows the absurdity of a designation which by its derivation implies the influence of an organ which that sex does not possess.

[2] Diagnosis of Diseases of the Brain, p. 81.

THE BATHS OF HAMMAM R'HIRA, ALGERIA, IN THE TREATMENT OF CHRONIC RHEUMATISM AND GOUT.

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HAMMAM R'HIRA (or Righa), in Algeria, is situated near a small village called Bou Medfa, which is on the line of railway between Algiers and Oran, being about sixty miles from the former and a little over two hundred miles from the latter, and is about nineteen miles, as the crow flies, in a south-westerly direction from the sea. The baths of Hammam R'hira are but little known, and as they are of great value in the treatment of rheumatism and gout, and combine many advantages, it has occurred to me that, having recently visited them whilst in Algiers, it may be of service to publish some remarks concerning them.

There are several trains daily from Algiers to Bou Medfa, and at the latter place a conveyance in connexion with the establishment, or a private carriage ordered beforehand, is in waiting to take the traveller to the hotel, which is a distance of about eight miles. A delightful drive, partly following the left bank of the Oued Djer and afterwards slowly winding up the hill, brings one to Hammam R'hira. This drive, occupying about an hour and a half, is full of interest, and is in the midst of most charming scenery, reminding one very much of some parts of Scotland. When first gaining a glimpse of the establishment, buried amongst trees, it seems at an enormous height, and as if almost impossible to reach by the road, which, however, is really well made and so circuitous that the most nervous invalid need have no fear, since the ascent is gradual. The height of Hammam R'hira is over 1900 feet above the level of the sea, and it looks towards the south-west.

It is worth a moment's pause to consider how it comes to pass that such an enormous pile of buildings as that constituting the whole establishment of Hammam R'hira should ever have been erected in a spot apparently so lonely and so isolated. The establishment consists of the hotel for visitors, the baths for the Arabs, a military hospital, and a small dependence having a farm attached. The position of these buildings is important, for it economises the water, which, flowing from the spring, is conducted first to the hotel and subsequently to the Arab baths, the latter being at a considerably lower level than the hotel. When the French conquered the country the springs were reported upon by the military surgeons, who recommended that a hospital should be established there, which was accordingly done in 1841. Later on the French Government were advised to facilitate any private enterprise having in view the building of an hotel which would be suitable for visitors and invalids, and which would enable the baths to be made use of. To erect such an establishment required a great amount of capital—and one has only to go over the hotel to have some idea of the very large sum of money which must have been spent on it,—so that it is not to be wondered at that for years nobody was forthcoming who would undertake the risk. At length, in 1878 M. Alphonse Arles-Dufour was induced to take the matter in hand, and by the expenditure of money, energy, and indefatigable labour the existing building was erected. Even now it is not perfectly completed, for a wing already built still remains to be finished when the pressure of visitors and patients warrants the additional outlay of capital. The baths were leased to M. Arles-Dufour for a period of ninety-nine years. The conditions on which the lease was granted, I gathered, were that within three years from the date of contract a civil hospital for poor colonists should be opened, and also that baths should always be reserved for the poor Arabs and Jews, who, it may be mentioned by the way, come a distance of many miles for the sake of them, and are said to greatly appreciate them.

This, then, is the brief history of the origin of the hotel. And now a word about the latter. The approach to the entrance is through well-kept grounds, planted with the beautiful flowers one is accustomed to see in that climate, as well as date palms, aloes, &c. From this entrance the building runs to the right and left, the entire erection

being in the form of a hollow square, the wings extending backwards at right angles. From the entrance hall the staircase ascends to the upper floors, and corridors run either way, with doors opening into private rooms, to the south-east and south-west corners, where the large dining-room and lofty drawing-room are situated respectively. From the level of the entrance one descends to the bath-rooms, which are situated on the ground floor, and here the chief attraction for the rheumatic or gouty invalid is to be found.

The baths are really two large swimming baths—one containing water at a temperature of 107° F., and the other that at a temperature of 110° F., the latter being only three degrees less than the natural temperature at which it issues from the spring. After bathing the patient enters a hot room, where he may recline on a couch for a sufficient length of time before returning to his room. By the end of this winter special private baths, already built, suitable for chronic uterine and other disorders, with proper douches &c., are expected to be completed, when the place will then have every possible means at command for treating the various classes of cases presently to be mentioned. There will then doubtless be such conveniences as *chaises à porteurs* for carrying delicate patients from their rooms to the baths and *vice versâ*, which are so greatly appreciated at Aix-les-Bains and other places. Patients rarely remain in the baths for more than ten minutes (although some do not remain even that time) or a quarter of an hour at the most, and afterwards retire to the hot rooms to rest. The atmosphere in the bathing-room is saturated with moisture from the vapour rising from the water. The latter is beautifully clear. It belongs to the class of thermal salines, and the following is the analysis of the hot spring. Temperature 45° C. (113° F.). One litre of water contains—

Carbonate of lime	0·207
Carbonate of magnesia	0·030
Sulphate of lime	1·303
Sulphate of magnesia	0·172
Sulphate of soda	0·017
Chloride of sodium	0·439
Silicate of soda	0·069
Alum	0·002
Peroxide of iron	Small quantity
Chloride of potassium	0·091
Total	2·330

It will be seen that the water principally consists of sulphate of lime, thus closely resembling the waters of Bath in this country both as to ingredients and temperature.

Of the efficacy of the baths of Hammam R'hira in chronic rheumatism I have had striking testimony, but, without mentioning particular instances, it may be stated generally that these baths are said to be beneficial not only in chronic rheumatism and gout, both articular and muscular, but in certain diseases of the nervous and cutaneous systems, periostitis, painful cicatrices, prostatitis, vesical catarrh, some chronic uterine affections, neuralgiæ, and some forms of paralysis.

In addition to the hot spring there is at Hammam R'hira a cold chalybeate spring which is of great importance. The following is the analysis of this spring. Temperature 19° C. (66·20° F.) One litre of water contains—

Unbound carbonic acid	0·8820
Bicarbonate of lime	0·9411
Bicarbonate of magnesia	0·0314
Bicarbonate of strontian	Small quantity
Bicarbonate of manganese	0·0008
Bicarbonate of iron	0·0100
Sulphuret of lime	0·5338
Sulphuret of magnesium	0·1623
Sulphuret of sodium	0·3425
Chloride of sodium	0·2801
Chloride of potassium	Small quantity
Silicate of soda	0·0240
Alum	0·0020
Organic substances	Small quantity
Arsenic and phosphoric acid	Small quantity
Total	3·2100

This chalybeate spring is situated about a mile distant, and the water conducted thence by pipes. It is by no means disagreeable, and is drunk by many at meals, either by itself or mixed with light claret, the presence of carbonic acid being distinctly an advantage. This water is useful in anæmia, chlorosis, and allied affections. It is said to be of much service in cases of dyspepsia, chronic hepatitis, and other affections of the liver, and also in malaria and cases of renal calculus—probably in the latter because of its slightly diuretic action. There can be no doubt that this water is of great service in helping the cure of chronic rheumatism, in many cases of which there is frequently associated also more or less anæmia.

A great charm of such an establishment is its situation. It occupies the edge of a plateau, as already stated, at a considerable elevation above the sea level. It is opposite to a pretty little village called Vesoul-Benian, from which it is distant only three or four kilomètres, but separated by a profound ravine, the valley of the Oued Hammam, running east and west. Beyond the opposite eminences towards the south the ranges of the lesser Atlas rise, whilst towards the west the summits of the Zakkar stretch upwards above Milianah. To the east the high peaks of Berouagia and Ben Chicao are seen, and if the weather is very clear some of the buildings of the Medeah can be made out. From nearly all parts of the grounds beautiful panoramic views are beheld, and the eye never wearies of the grandness of such scenery. To those who are fond of sport, and who are well enough to enjoy it, there is ample opportunity afforded for gratifying their tastes. For in a pine forest of 1800 acres there is abundance of game, including the red partridge, hares, rabbits, wild boar, jackals, and rarely an eagle. There are numerous beautiful walks, and for those who are unable to walk far, many pleasant excursions can be made on ponies, mules, or donkeys. It may be of interest also to state that for the antiquary there is a large and varied field opened up calculated to delight the heart of an enthusiast. To prove how much there must be connected with the surroundings of profound interest, it is only necessary to mention that the Hammam R'hira of to-day is in the same situation as the Aquæ Calidæ of the Romans, a town which flourished under the reign of the Emperor Tiberius, about A.D. 32. Even then it is recorded that many suffering from various disorders gathered there on account of the benefit to be derived from its waters. If we may judge from the accounts collected from various sources, Aquæ Calidæ was more than once reduced to ruins and rebuilt. More than a century ago an English archæologist, Dr. Shaw, describing these ruins, spoke of traces of an ancient rampart, of a building with colonnades situated in the centre of the town, and of a monument in the form of a temple. He also described two basins of unequal size; one he believed to have been for the Jews, and the other for the Mahometans. A museum which has been started by the proprietor contains a collection of much antiquarian interest.

In mentioning the claims of Hammam R'hira, I am influenced by the fact that we have no place like it, or which can be in any way compared with it in this country or on the Continent. I have already referred to the similarity of the waters of Bath, both as to composition and temperature; but we all know what the climate of Bath, or indeed any place in the British isles, is like in winter. At Hammam R'hira, however, one lives in a delightful climate, with pure air, a beautiful blue sky, plenty of sunshine, and under conditions the most favourable to the invalid. The mean temperature at 9 A.M. ranges from 53·6° to 59° F.; at midday, 64° to 69·8°; and at 5 P.M., 53·6° to 59°; so that as compared with Algiers the temperature is somewhat lower. The best months for visiting Hammam R'hira are October, November, and December; but, from what I gathered, it would be advisable, if possible, to avoid arriving there during the end of December or January. The days are apt then to be rainy, although—and this is an important matter to remember—in the event of wet weather invalids can walk along an extensive glazed corridor running the whole length of the hotel, so that they may have the advantage of regular exercise in an agreeable atmosphere, with a pleasant view, in spite of rainy days. There are, however, comparatively few days on which a patient cannot go out for exercise at some time or other.

The only place abroad which can be, from a medical point of view, compared with Hammam R'hira is Helouân, in Egypt. It is sixteen miles by rail from Cairo and three miles from the Nile, being 112 feet above the level of the river, and situated on a firm plateau of sandy soil. The mineral springs belong to the hot saline sulphur class, and as there is a pure desert climate, gouty and rheumatic

patients derive great benefit from treatment there. But Helouân is a long way off, and the journey alone in many instances contra-indicates treatment there.

The Acqua di Gurgitello of Ischia, containing as it does chloride of sodium, carbonate of soda, sulphuretted hydrogen, as well as free carbonic acid, and having a temperature of 170° F., is justly celebrated, as are the other springs there, in the treatment of gout, rheumatism, &c. But, in addition to there being several reasons against it, the climate, although delightful, is not so favourable as that of Hammam R'hira. Similar remarks may be made of Castellamare in the Bay of Naples, with its muriatic alkaline springs, of which Dr. John Macpherson has given an interesting account.

Although mostly resorted to by rheumatic and gouty patients, there cannot be any doubt that the climate of Hammam R'hira is suitable for many cases of pulmonary disease. And there is this much to be said concerning Hammam R'hira with reference to lung troubles: if patients are sent there, they have not the innumerable temptations existing in so many places of doing what they know to be contrary to their physicians' orders. They live regularly and well, have plenty of amusement in-doors for the evenings, are in comfortable well-aired rooms, and are placed under the most favourable hygienic conditions. Whilst being miles from the nearest town, they are in telegraphic communication, so that they are not shut off from the world; and there are regular daily posts. It may be mentioned that, being so close to Algiers, it forms an agreeable change to residents living there, and acts as a beneficial tonic, the climate of Hamman R'hira being more bracing.

In the foregoing there is nothing said which is in any way intended to disparage Aix-les-Bains, Wiesbaden, Aix-la-Chapelle, Wildbad, and numerous other continental watering places. These are all excellent in the warm summer months, but they cannot, for obvious reasons, be recommended in the winter. For those who desire to have many months' continuous treatment (and there can be no question that many cases of chronic gout and rheumatism yield to no other plan), it is easy to leave Hammam R'hira as summer approaches, and migrate to one of the many places of a similar kind within reach on the Continent. Anyone who desires further information may be referred to "Itinéraire de l'Algérie," by Louis Piesse; "Handbook for Travellers in Algeria and Tunis," by Sir R. Lambert Playfair, K.C.M.G.; and also to interesting articles by Mr. Geo. Pollock (who was, I believe, the first in this country to draw attention to these baths) in THE LANCET for 1881, and Dr. Lauder Brunton in the *Practitioner* for 1881.

A SEVERE CASE OF HYSTERIA, CURED BY MASSAGE, SECLUSION, AND OVER-FEEDING.

BY EDWARD G. DUTTON, M.R.C.S., L.S.A.

ONE day last summer I was requested by the vicar of the parish to see Miss M. B——, aged eighteen, who was stated to be dying of consumption. For two years previously to this she had been under the care of several medical gentlemen, during the latter part of which homœopathy had been tried without any relief. I made a thorough examination, but could find nothing abnormal, except a little puerile breathing at the apex of the right lung, and two very tender spots over the region of the stomach; I say over the region of the stomach, because it was impossible to make out the position of that organ by palpation. The tongue was large, white, and flabby, with marks of teeth thereon. Temperature normal; pulse 120; respiration 40. The bowels had not been open for a week, and the interval was usually from ten to fourteen days. She was nothing but a bag of skin and bones. The abdomen was extremely retracted. Vomiting was persistent, nothing being retained, not even cold water; and when food was not taken frothy mucus was being regurgitated in large quantities all day long. She was very hysterical, and seemed on the point of death from exhaustion. Her mother stated that at the age of fifteen years she was quite a woman. She had been apprenticed to the dressmaking trade. She often went away in the morning without breakfast, and the money given her to buy dinner was generally spent in sweets and cake. The family history was good.

After giving the patient very small quantities of soluble food and beef peptonoids every hour, a mixture containing bismuth, liquor strychniæ, tincture of belladonna, and hydrocyanic acid, three times a day, and one grain of oxalate of cerium every night, the vomiting gradually subsided, and at the end of a month she was able to get out of bed and crawl about the room with assistance. I then began to try ordinary food; but milk, crushed raw steak, bread, and bread-and-butter puddings, were the only things retained, besides a cup of hot tea the first thing in the morning. I may add that she never slept more than three hours during the night. This condition continued for the next six weeks, although she gained fifteen pounds in weight, and menstruation was seen for the first time for more than two years. Her power of progression was little improved, and she remained in a highly hysterical state. Shortly after this I found out by accident that she never vomited anything given by me personally at my visits, but everything, except the few things mentioned above, were always returned in my absence. I now became very dissatisfied, and declared my inability to go on with the case unless she was allowed to come into my house. Consent was obtained after a week's indecision, and on Oct. 4th, 1887, four months after my first visit, she was placed in a cab and driven to my residence. I at once placed her in bed, and performed massage for one hour, giving her three pints of milk in small quantities during the twenty-four hours, with a quarter-grain podophyllin pill every night; massage to be repeated for one hour twice daily. On Oct. 8th the milk was increased to two quarts, with one pint of beef-tea. Bowels opened. There had been no vomiting since my arrival. She was able to sleep for six or seven hours. On the 12th the beef-tea was increased to two pints, and bread allowed with the same. The bowels were now regular. On the 15th weak tea was allowed twice daily, with an egg beaten up in it. From this time forth she improved day by day. The following is a list of the food taken during the day: At 8.30 A.M., four ounces of milk; 9 A.M., tea, egg, and bread-and-butter; 9.40 A.M., four ounces of milk; 11.30 A.M., four ounces of milk; 11 A.M., broth and bread; 11.40 A.M., four ounces of milk; 12 noon, sandwich; 12.40 P.M., four ounces of milk; 1 P.M., broth; 1.40 P.M., four ounces of milk; 2 P.M., apple and bread; 2.40 P.M., four ounces of milk; 3 P.M., broth; 3.40 P.M., four ounces of milk; 4 P.M., sandwich; 5 P.M., tea, egg, and bread-and-butter; 6 P.M., four ounces of milk; 6.30 P.M., pudding; 7 P.M., four ounces of milk; 8 P.M., four ounces of milk; 8.30 P.M., broth and bread; 9 P.M., four ounces of milk; 10 P.M., four ounces of milk; 11 P.M., four ounces of milk. On Oct. 25th she was allowed to get up for the first time since her arrival at my house. The food and treatment were exactly the same. On the 27th she began to walk much better. On the 29th she practised going up and down stairs. On Nov. 1st she saw her mother, being the first person she had seen except myself and the lady nurse. Her weight was 110 lb.; on her arrival she scaled 85 lb.: she had therefore gained 25 lb. in twenty-eight days. On Nov. 2nd she was allowed out in the garden, and sat down to ordinary meals. On the 8th she was sent home on foot, a distance of a mile and a half, quite well, weighing 116 lb. For the next six weeks I saw her once a week, and ordered her to take the following meals each day: 8.30 A.M., half a pint of milk; 9 A.M., tea, egg, and bread-and-butter; 11 A.M., porridge; 1 P.M., dinner; 4 P.M., afternoon tea; 6 P.M., tea, egg, and bread-and-butter; 8 P.M., porridge; 10 P.M., half a pint of milk. On Dec. 22nd she was allowed to resume ordinary meals. She could now walk five or six miles a day. She had never vomited since leaving my house, and felt quite well. I saw the patient on March 16th, and she was remaining quite strong and well.

Remarks.—The massage was performed by myself (there was no air of mystery about it) for two hours daily. No medicine was administered except a little podophyllin, as she had taken gallons during the previous thirty months. In my experience the only medicines that do any good in these cases are oxalate of cerium and a saturated solution of nitric acid and oxide of zinc. Enormous amounts of food were assimilated without the slightest inconvenience. I find it advisable in these cases not to give any nourishment between 11 P.M. and 8 A.M. Sleep of seven hours' duration was procured after the evening's massage.

The bowels became regular. This favourable symptom must be put down to abdominal massage, as podophyllin had been exhibited beforehand without the wished-for result. Unfortunately in my part of the country medical men advise massage for nearly every ill that man is heir to, and thereby bring a wonderful remedy for good into bad repute. During the last twelve months about a dozen cases in all of severe hysteria, neurasthenia, and chronic dyspepsia have come under my personal care, and they have all been cured by massage and proper feeding without medicine, cases in which dosing was previously so systematic as to become almost second nature.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOXIOUS SALTS OF TIN IN FRUITS PREPARED IN TIN VESSELS.

By LEONARD W. SEDGWICK, M.D.

THE harmlessness of the salts of tin other than the chlorides is generally taken for granted, but the following facts appear to show that the assumption is incorrect.

In October, 1886, I saw nine persons in one well-managed, healthy household simultaneously suffering from watery diarrhœa, sickness, and great pain in the abdomen. A close investigation served to show that, excluding the water they drank (which was pure) and the air they breathed (which was free from drain contamination), there was one thing, and one thing only, they had done in common, and that was the eating of pears stewed in a newly tinned copper pan. It came out, too, that many of them had suffered from two or three similar attacks on previous days, and that these attacks had all occurred on days when they had eaten stewed pears. I therefore obtained some pears so cooked, and, on testing the juice, found it laden with tin salts, but containing no copper. That the diarrhœa gave way in a short time to simple remedies, that the drainage and the water supply of the house were perfect, that the eating of stewed pears preceded on the same day each attack of illness, and that pears similarly stewed were found to contain large quantities of tin salts, were to my mind conclusive, if circumstantial, evidence that the attacks of diarrhœa were caused by the tin salts. And then occurred the thought that, if the cooking of a somewhat acid fruit for a short time in a tinned vessel effected the formation of a poisonous salt of tin, the keeping of an acid fruit for months in a tin can must have a like result. I therefore tested the contents of cans of apricots, pine-apples, peaches, and tomatoes, and in every instance found a large amount of a salt of tin. In this I was confirmed by my friend Mr. Hugh Power, who also in one specimen detected a salt of zinc. Since then I have seen several instances where painful diarrhœa followed the eating of a tinned fruit, especially in one case, where tinned pine-apple was eaten by several persons, who all suffered in like manner. And so I am compelled to believe that many cases of casual and unexplained nausea and diarrhœa are caused by the use of tinned fruit. Indeed, since the occurrence of the cases in 1886, I have lost no opportunity of relating these things to my personal acquaintances, and of advocating the use of bottled fruits only.

PERICHONDRITIS OF THE LARYNX; TRACHEOTOMY; RECOVERY.

By FRANCIS HOLLINSHEAD, M.R.C.S., L.S.A.

THE following particulars of a case which occurred in my practice eight years ago may be of some practical interest at the present time.

R. W——, aged thirty-nine, pointsman on the Midland Railway, consulted me for a troublesome hoarse cough, attended with difficulty in breathing. He had all the symptoms of a severe attack of laryngeal catarrh, and was treated by poultices and counter-irritation, together with the usual remedies and inhalations. The case continued to get worse, the difficulty of breathing increased, and the patient could only articulate in a whisper. On laryngoscopic examination, the larynx was found red, swollen, and ulcerated; there were also thickening and tenderness externally. The patient was now put on large doses of perchloride of mercury, with iodide of potassium and cinchona, and at the same time he was kept in a warm atmosphere, the inhalations being continued. There being no signs of improvement, Dr. (now Sir) Walter Foster saw the patient in consultation with me. He advised the continuance of the treatment, but to be in readiness to perform tracheotomy should the symptoms of dyspnœa increase. The man continued to get worse, and on the following morning at 5 A.M. I found him so bad, with suffocation impending, that, with the aid of my then assistant, Mr. Welch, I immediately opened the trachea and inserted a tube. The result was immediate relief of the patient's suffering; from being cyanosed, he recovered all power of breathing, became calm, and natural in colour. I kept him in a warm atmosphere, with hot sponges over the orifice of the tube, constantly reapplied, and continued the medicinal treatment as before. The case went on well, the cough gradually lessened, and the thickening of the larynx and ulceration subsided. Later on a piece of exfoliated cartilage was coughed up, the expectoration daily diminished, and at the end of two months from the operation I deemed it advisable to make an attempt to do without the tube. I first experimented by removing it for a few hours, keeping the patient under close observation the whole time. Finding that he did not get worse, I allowed him to remain without it, and at the expiration of one month from the removal of the cannula the external wound had healed and he continued to breathe quite freely. This patient is still alive and has had no return of the disease, and but for some feebleness of voice is quite well.

The success of this case appeared to me to be due to the removal of the cannula at the time when the larynx had so far recovered as to enable the patient to breathe fairly well without it, as the pressure of it, acting as a foreign body, seemed to set up some irritation in the trachea, causing exuberant granulations to appear around the orifice of the wound.

ON THE TREATMENT OF CARBUNCLE BY CARBOLISED SPRAY.

By H. BLANC, M.D., F.R.C.P.

PROF. VERNEUIL, at the meeting of the Academy of Medicine of Paris held on January 17th last, made an interesting communication on the treatment of carbuncle by carbolised spray.[1] He stated that in 1883, in a severe case of carbuncle, he directed that carbolised spray be frequently applied in order to thoroughly disinfect the parts previously to an operation being performed. To his surprise, he found that under the use of the carbolised spray such improvement had declared itself that surgical interference became unnecessary. Henceforth he exclusively resorted to the carbolised spray in all cases of carbuncle. Whether they were large or small, painful or indolent, complicated or not with diabetes, previously opened by surgery, by sloughing, or with the skin as yet unbroken, in every case the same local treatment was applied, and always with a successful result.

Prof. Verneuil prefers the steam spray. The larger the carbuncle and the more perfect the skin, the more powerful the apparatus does he select. He places the apparatus a short distance (about ten inches) from the diseased parts, regulating the intensity of the spray according to the feelings of the patient. Usually he allows the spray to reach the parts unprotected; occasionally, however, he covers them with a layer of muslin. He employs a 2 per cent. solution of carbolic acid, and applies the spray three or four times daily, for about twenty minutes each time. Between the sittings he dresses the carbuncle with lint soaked in carbolic acid solution of the same strength. He is careful to protect the parts around the carbuncle from the action of the spray.

Shortly after reading an account of Prof. Verneuil's treatment a severe case of carbuncle was admitted under my care into the Protestant Hospital of Cannes, and as the patient

[1] La Semaine Médicale, Jan. 18th, 1888.

was in a very bad condition of health, I felt disinclined to submit him to any surgical procedure, and thought I could not do better than follow the treatment so strongly recommended by such a high authority in surgery as Professor Verneuil. The result obtained was in every respect most satisfactory.

A. B——, an American, aged fifty-four, but looking older, was admitted into the Protestant Hospital of Cannes (Asile Evangélique) on February 22nd last, suffering from a large carbuncle involving the whole of the nape of the neck, extending from the sixth cervical vertebra to the occipital protuberance and from one mastoid process to the other. The disease was of eleven days' duration. Beyond poulticing no other treatment had been applied. The whole of the nape of the neck was swollen, hard, and of a dusky livid colour. A few superficial sloughs, through which some sanious pus discharged, had formed in two or three places, but not in the centre of the mass. The pain was intense, totally preventing sleep. The patient was greatly exhausted, very weak, and depressed; there was complete anorexia; the pulse was 120, feeble and compressible; the skin clammy; the temperature on admission 102·3°; the urine scanty, but containing neither albumen nor sugar. Our small hospital possessing no steam spray, I used a large hand spray instead, previously warming the carbolic acid solution; in other respects the treatment as laid down by Prof. Verneuil, was strictly carried out. After the first twenty-four hours the pain lessened and there was an evident arrest in the progress of the disease. On the third day of the treatment a decided improvement set in; the temperature fell to normal; the central portion of the carbuncle—a very oblong centre—was softer; the hard brawny circumference was less infiltrated, and the parts altogether looked more healthy. The parts were still very tender on the slightest pressure, but the pain had mostly disappeared. Laudable pus issued through the largest of the spontaneous openings, and the sloughing process was elsewhere arrested. The further notes of the case are as follows:—March 6th (fourteenth day of treatment): The carbuncle is greatly reduced in size; the surrounding infiltration has disappeared. Some cellular slough was removed through the openings. The general condition is greatly improved, the carbolic acid treatment omitted, and the parts dressed with boracic acid ointment and salicylated cotton wool.—12th: A large cellular slough some five inches in length was removed through the only opening remaining.—21st: The patient takes his meals at the convalescents' table, and walks in the garden when the weather is fine. Some slight discharge through the opening.—29th: A small granular ulcer occupies the site of the spontaneous opening; the parts have otherwise returned to their normal condition. The patient is now quite well, and has gained much in flesh and in strength lately.

GUNSHOT WOUND OF THE PALM.

By SIDNEY THORP, M.R.C.S.

ON Feb. 3rd last I was called to a young man who in a careless way and in an unguarded moment discharged one barrel of a five-chambered revolver through the palm of the left hand. The ball passed through the palm between the heads of the third and fourth metacarpal bones. I was called to see him about two hours after the accident and found him suffering more from shock than anything else. There was a darkened look where the ball made its ingress and egress, but scarcely any bleeding. I could find no injury whatever to the heads of the bones; no fracture could be detected. The hand was ordered to be dressed with boracic oil and wadding, and the limb to be kept at rest. He was placed on milk diet and given chloral and morphia at bedtime. — Feb. 4th: Passed a fairly good night. Hand and forearm very red and erysipelatous-looking; both to be well painted with antiseptic paint; wadding to be reapplied. A purge to be taken at once, and morphia and chloral at night. — 5th: Passed a good night. Bowels relieved. Looks cheerful. To have a chop for dinner. Swelling in hand and arm much improved. Arm to be kept at rest. Boracic oil to be applied to wounds of ingress and egress. From this date the hand improved greatly, and in a fortnight's time he sailed for Australia.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

A CASE OF LEUCOCYTHÆMIA, WITH LARGE SUBCUTANEOUS HÆMORRHAGE; NECROPSY.

(Under the care of Dr. HALE WHITE.)

THE chief points to which we would draw attention in the following case are—the absence of any history of ague, the presence of symptoms due to the altered condition of the blood for some time before the enlargement of the abdomen was noticed, and the unusual size of the subcutaneous hæmorrhage, which appears to have hastened the fatal ending. There does not seem to have been any alteration in the condition of the medulla of the bones. For the notes of the case we are indebted to Mr. H. J. Campbell.

J. B——, aged thirty, was admitted on April 23rd for enlarged liver and spleen. The family history was very good, and there was no account of ague. The patient was born in Essex, near Chelmsford, but left there when fifteen years old, and has since lived in London. He has never had ague. He has all his life been exposed to the weather, especially since he came to London, his occupation being that of a carman. For the past five months, the patient has suffered from pains in the head, dimness of vision, buzzing in the right ear, weakness, languor, and shortness of breath. His abdomen has been steadily increasing in size, and latterly has been tender to pressure over both liver and spleen. The symptoms have been rapidly getting worse during the last month. He weighs 21 lb. less than he did nine months ago.

State on admission.—The patient does not look anæmic. Skin bronzed over abdomen, neck, and face. The slightest exertion causes dyspnœa. Headache and vertigo severe. Respiratory system normal. No pleural effusion; no ascites. The liver is very large, and the right lobe extends down to the level of the umbilicus; the left lobe is continuous with the spleen, the latter extending as low as midway between the umbilicus and the pubes, and curving forward to the middle line, the notch being opposite the umbilicus. Liver and spleen tender on pressure. Pulse of low tension, rapid, not running. Blood pale; contains only 40 per cent. of the normal amount of hæmoglobin, one-third of the normal number of red corpuscles, and an average of twelve white corpuscles to every sixteen red. Double optic neuritis is present, but no hæmorrhage can be seen. The lymph glands in the groins and axillæ are slightly enlarged and hard. Urine normal, except for a large deposit of oxalates.

On mercury and iodide of potash and abundant food the patient's condition improved; the red corpuscles increased, and the white diminished. On April 5th he felt stronger, and was able to walk about the ward. The optic neuritis steadily grew more marked, and a small retinal hæmorrhage was seen in the left eye. On the 6th there was some pain in the back, with slight cough, the sputum being streaked with blood, and there was slight epistaxis. On the 8th he was unable to get up, and lost his appetite. In the afternoon he complained of severe pain in the left axilla, and on examination a large hæmatoma was found to occupy the axilla, it being about four inches in antero-posterior measurement, and six inches from above downwards. On inserting a needle pure blood came out. This swelling rapidly spread, and by the 9th extended from the axilla to the sixth rib, and from the nipple to the vertebral groove. There was no pallor or collapse. The pulse was feeble and running. At 9 A.M. on the 9th the patient vomited undigested food, and complained of pain in the abdomen and great thirst; restlessness was not marked, but there was slight delirium. At 11.50 the patient suddenly died. During the whole of the time the temperature showed an evening rise and morning fall ranging from 97° to 102°.

At the necropsy the superior and inferior venæ cavæ were found to be much engorged. The heart was enlarged, and

there was considerable dilatation, with slight hypertrophy. There was a large effusion of blood under the serratus magnus on the left side, containing 24 oz. of imperfectly clotted blood. The liver weighed 193 oz., the spleen 57 oz.; there being some capsulitis of the spleen, with hæmorrhages on the surface. Blood turbid, and of a chocolate colour. No change in marrow of sternum.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

DIFFUSE OSTITIS OF TIBIA.—CHEIRO-POMPHOLYX.

(Under the care of Mr. EDMUND OWEN.)

FOR the notes of the following cases we are indebted to Mr. R. C. Priestley, registrar.

CASE 1. *Diffuse ostitis of tibia.*—A boy of twelve years of age has been in the Louise ward since March 20th with general enlargement of the left tibia. His mother had six weeks previously first noticed that the leg was swelling, but the changes must have been going on much longer than that, for at the time of his admission there was not only general thickening of the entire bone, but the bone was greatly bowed forwards, and was increased in length by at least a quarter of an inch. There were slight redness, œdema, and elevation of temperature in the skin over the shin, and the bone was evidently tender. The patient was the youngest of seven children, and was apparently the only unhealthy one in the family. He has suffered from otorrhœa and headaches at various times. He has never hurt the diseased tibia. His father died of some lung disease; his mother has had no miscarriages. The boy certainly had not the characteristic appearance of inherited syphilis, though he did not look healthy. There were delicate white scars of radiating linear ulcerations at the corners of the mouth, and there was a suspicious pegging of the left lateral incisor. In the crescentic notch which its narrowed crown presented, however, there was a small tubercle such as one does not expect to find in a Hutchinsonian tooth. As regards the central incisors of the upper jaw—the "test-teeth,"—all that one can affirm is that their long axes sloped downwards towards each other.

For a week or two the boy was kept in bed, and was watched to see if he would improve without antisyphilitic treatment; but he made no progress until small doses of grey powder were regularly administered. After this the local conditions became considerably improved; there was less tenderness about the bone, whilst the skin was no longer smooth and shining, but its cuticular layer was thrown into delicate wrinkles, showing a general diminution of vascular tension.

Remarks by Mr. OWEN.—Diffuse interstitial osteitis in children is generally the result of hereditary syphilis, but in this case no direct evidence of the congenital disease could be obtained. But the supicious obliquity of the central incisors, the doubtful notch in the left lateral incisor, and, above all, the radiating linear scars at the angles of the mouth, when taken together, afforded strong circumstantial evidence of the specific nature of the disease. And to all this the improvement under the administration of the small doses of grey powder added further confirmation.

CASE 2. *Cheiro-pompholyx.*—Emily C——, aged ten years, healthy-looking and vigorous, was admitted on March 8th last, with a fairly good family history; at any rate, there was no reason to suspect that she was the subject of any hereditary taint. One Saturday last summer she went for a holiday to Hackney Downs, and, getting very hot, she drank a large quantity of cold water. On her return home she complained of great pain in the feet, and the mother, on examining them, found the soles studded with a crop of blisters of various sizes, which she thought might possibly be due to pressure from the boots. Since then, however, the child has had periodic attacks of blebs upon the palms of the hands as well as on the feet. They last for about a week, and, disappearing, leave the parts extremely tender.

On admission, there was one large bulla containing clear fluid on the plantar surface of the right great toe, and another still larger over the second and third metatarsal bones. There was also a large bleb under the heel, and there were some small ones on other parts of the sole. The blebs were tender, and the surrounding skin was red. A day or two after admission the child developed a rash of lichen urticatus on the flexor aspect of the legs and arms. She was prescribed liquor arsenicalis, and in due course all her troubles disappeared. As, however, she affirmed that the blebs appeared upon the hands and feet regularly every month, she was, though apparently in excellent health, kept in the hospital for a week or two beyond the month; but her statement was not verified. She is still to be kept under supervision.

Remarks.—Pemphigus of the hands and feet is a sufficiently rare disease, even in childhood, to justify the publication of this typical case. What may have been the cause of the first occurrence of the disease is uncertain. Although the child had been running about all day, the blebs did not appear, merely because she was footsore—the fact of the hands being subsequently implicated is evidence of some general disturbing cause, which probably acted through the nervous system.

BOLTON INFIRMARY.

A CASE OF MULTIPLE SARCOMATA; DEATH; NECROPSY.

(Under the care of Dr. GILLIBRAND.)

FOR the following notes we are indebted to Mr. E. C. Kingsford.

Rebecca R——, aged forty-five, was admitted on Jan. 9th, 1888, for persistent vomiting. The family history was unimportant. She has been married fifteen years, and had seven children, six of whom are living; one miscarriage before birth of second child. Menstruation had been regular up to the previous June; she had seen nothing since then, and at the time of admission again commenced to menstruate. She had always enjoyed good health, but at the end of October was seized with frequent vomiting, which was preceded by pain in the left side; this lasted for five days. There was then abatement of symptoms for three weeks, after which they recommenced, and continued with more or less severity up to the time of admission. Previously to October the patient had been comparatively stout, but had since been getting rapidly thinner.

On admission she was much emaciated, with dry shrivelled skin, and some bright petechiæ scattered over the chest; these she had not noticed until her attention was drawn to them. Cardiac sounds normal. Dulness at left apex, with absence of respiratory murmur and vocal fremitus. Temperature normal. No headache. Optic discs normal. No abdominal tumour to be felt. Aortic pulsation quite perceptible. Vaginal examination showed the os to be rather low down, expanded in all directions, and quite smooth. The uterus was freely movable, and the ovaries could not be felt. There was a small impressionable tumour on the upper surface of the left clavicle about its centre, painful on pressure; and a resistant mass in the position of each thyroid lobe, that on the right side being about the size of a large horse bean, and that on the left twice as large; these were not painful on manipulation, and no other such tumours could be found about the body. Vomiting occurred frequently, quite irrespective of the ingestion of food, and was always preceded by a sensation in the throat in the neighbourhood of the thyroid. Urine normal.

The vomiting continued, but varied considerably from day to day, and was always more severe in the early morning. On Jan. 22nd she first complained of headache at the vertex and in the frontal region, and the next day had two epileptic seizures, the left arm being chiefly implicated; she had never been affected with anything like a fit before. On the 24th the right optic disc was found to be slightly blurred, the left being normal, as were also the fundi and vessels. She was allowed to get up on the 31st, not having vomited for a week, but was immediately seized with headache and sickness. From this time onward the headache persisted, being most severe in the upper occipital region; and she was troubled with coughing, hiccough, and vomiting, although she was able to take her food fairly well.—Feb. 9th: Right pupil dilated.—10th: Another epileptiform fit, followed by paresis of the left arm and slight bronzing of the skin, was noted, but it did not increase. Cardiac impulse felt outside the nipple line, and on the 19th it was reported as above the level of the nipple, in a line with the anterior axillary fold. Pulse 136; temperature normal; respiration easy. A few more petechiæ had appeared on the abdomen, and albumen was found in the urine for the first time, but not in any considerable quantity, and after three or four days it disappeared

altogether. The patient now began to pass urine and fæces in the bed.—March 1st: Both pupils dilated; borders of optic discs very indistinct.—12th: Temperature generally subnormal; emaciation much increased; pulsation of abdominal aorta clearly visible. No tumour could be felt; the pelvic region, however, was too tender to allow of palpation. Food taken freely, but only in small quantities at a time.—April 3rd: Extremely low; could not talk; gaped at frequent intervals; perspired freely. Temperature 97°; pulse 140. Optic discs pale, ill-defined, and fluffy at margins; small retinal hæmorrhages in both eyes. She rallied slightly after this for a day or two, and then gradually sank, dying on April 12th.

Post-mortem examination revealed a large tumour involving the base and upper part of the left lung; also three firm tumours, about the size of horse chestnuts, in the body of the pancreas, the rest of the organ being narrow and shrunken; a white, softish mass, about the size of a hen's egg, replaced each suprarenal body; in place of the left ovary, there was another mass, made up of small, solid, and semi-fluctuating tumours, and a small cyst in connexion with the right ovary. The cerebral hemispheres were quite healthy in appearance, but in the cerebellum, at its junction with the pons, was a soft tumour, about as large as a pigeon's egg, which extended to the surface at the under part of the left lobe, having the appearance of a patch of softening; the fourth ventricle and commencement of the spinal canal were much expanded, but communicated freely with the subarachnoid space. All these tumours, as well as that of the clavicle and thyroid body, and one found on the inner surface of the second left rib, have been examined microscopically by Dr. Yates, and found to be small-celled sarcomata. The stomach was small and contracted, otherwise healthy, as were also the intestines. All the other viscera were normal, and the liver weighed 48 oz; no enlarged glands found. Unfortunately the sympathetic system was not examined, nor was it noticed whether the mediastinal growth pressed on the thoracic duct or involved the pneumogastric nerve.

Remarks.—From the onset of symptoms it seems probable that the ovarian trouble was of the longest standing, and that the brain lesion occurred considerably later. The mediastinal growth existed at the time of admission, but, judging from the rapid emaciation, was in all probability preceded by the post-peritoneal mischief.

Medical Societies.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Treatment of Sterility and Obstructive Dysmenorrhœa.—Five Cases of Abdominal Section.

A MEETING of the Obstetric Section of the Academy was held on March 16th.

Dr. DUKE exhibited a Uterine Cervical Dilator, constructed on a new principle, and intended for rapid dilatation.—Dr. MORE MADDEN said he had seen Dr. Duke's dilator used with good effect in some cases of stenosis of the cervix in his hospital; and if members of the Section used it he believed they would admit its efficacy in appropriate cases.

Dr. MORE MADDEN read a paper on the Treatment of Sterility and Obstructive Dysmenorrhœa. He said that in the recognition of stenosis, either of the uterine cervical canal or of the Fallopian tubes, will be found the best key to the study of the pathology and to the successful treatment of both these closely associated morbid conditions. The frequency of such cases is far greater than is generally admitted, and in his own hospital they furnished nearly 11 per cent. of all the gynæcological cases there treated. Of all the ailments of female life, few give rise to greater or more persistent suffering, or produce more disastrous effects, not only on the general physical health, but also on the cerebro-nervous system, and on the moral constitution of the patient, than result from well-marked obstructive dysmenorrhœa. The importance of the last-mentioned consequence of dysmenorrhœa—to which he directed special attention in an article of his on the Disorders of the Female Sexual Functions, in Quain's Dictionary of Medicine—is by no means so generally recognised as it should be. The effects of the second of the morbid conditions that form the subject of this communication are certainly of no less moment in a practical aspect than the results to which he had just referred as consequent on the first-named ailment; the latter involving, as they may do, not only the physical health and well-being of the patients, but also, in too many instances, intimately affecting their social interests and the happiness of conjugal life.—Dr. W. J. SMYLY believed that the frequency of stenosis had been greatly exaggerated.—Dr. MASON said there was no doubt that obstructive dysmenorrhœa complicated with sterility was an exceedingly common complaint, and was a cause of great physical suffering and mental trouble. He held that, once the cervix was divided bilaterally, there was no necessity for dividing it any more; and the use of Dr. Madden's dilator was, he thought, calculated to cause a danger of pelvic inflammation. The treatment he (Dr. Mason) ordinarily followed was to divide the cervix bilaterally for its entire length, enlarge the opening of the os externally with a scalpel, and then to apply some astringent—perchloride of iron—in some cases, and to plug the vagina in others. A number of the women operated on for this disease became pregnant afterwards, but that number was not large in proportion to the number of operations. The number of cases relieved by operation was, however, large; a fair prospect of cure might be held out to every patient operated on for dysmenorrhœa.—Dr. ATTHILL said the first question was, Did stenosis of the cervix ever *per se* cause dysmenorrhœa? He was inclined to answer that question in the negative. He had seen instances in which the os uteri was so small that he could only get an ordinary surgical probe into it, and in which, nevertheless, there was no dysmenorrhœa. But that they might have cases of dysmenorrhœa indirectly depending on a small pinhole os uteri and a conical cervix was perfectly true. He also totally denied that a small cervix was *per se* a cause of sterility. In cases of small os uteri, where there was no dysmenorrhœa, the uterus and cervical canal were nearly always what was termed infantile or rudimentary, and menstruation in those cases was nearly always scanty, but in the main perfectly painless. In nearly every case of stenosis of the uterus in which pain existed there was a more or less unhealthy condition of the uterine mucous membrane, which was vaguely termed uterine catarrh—the catarrh being a symptom and not a cause, the latter being some form of intra-uterine disease. He looked on division or dilatation of the cervix in those cases as the first step towards the cure of the dysmenorrhœa, and consequently the first step towards the cure of sterility. In many cases he divided the cervix, and treated the uterus secondarily for sterility, and very often with great success, where there was no dysmenorrhœa at all. It was his opinion, and had been for many years, that the cases of dysmenorrhœa and sterility in which there were a conical cervix and small os could never be cured without first dividing the cervix. But division—or dilatation, if that were preferred—was a step towards completing the cure, the *rationale* being that by making the cervix uteri free the escape was allowed of the pent-up discharges, which otherwise caused irritation and pain. With respect to the modes of making the uterus wide, in the first place he entirely disapproved of dilatation as a cure. He had seen it tried over and over again, and the patients pronounced to be cured because they were free from the dysmenorrhœa, and after a couple of months all the symptoms would return.

Mr. O'CALLAGHAN read the following notes on five cases of Abdominal Section. Case 1: Pyosalpinx with Tumour (age twenty-six). On opening abdomen found tube on point of rupture bound down with extensive adhesions, with intra-ligamentous tumour growing from uterus and filling out the broad ligament. Aspirated tube and washed it out with strong carbolic lotion. Dr. William Smyly agreed with him that it would be wrong to attempt removal of tumour or the tube under the circumstances. Closed wound, which healed by first intention. Marked improvement in this case; died in nine months after; tumour proved malignant.—Case 2: Fibro-sarcoma (age seventeen). Tumour presented in right side, with history of rapid growth in six months. On opening, found a large nodulated tumour attached to the outer margin of broad ligament. He enucleated this, hæmorrhage at this stage being very brisk; but the capsule being very thin from size of tumour, he was able to shell it out quickly; bleeding easily controlled by pressure with sponges, and, tying tube and bed of tumour with Chinese silk, as used by Mr. Tait, washed out peritoneum, closed wound without a drain,

and healed by first intention, with normal temperature throughout. Tumour weighed 3 lb.—Case 3: Ovarian Cysts with Cancer of Peritoneum (age fifty-two). On opening abdomen, found large cyst adherent to anterior wall of the peritoneum, which was studded with white ivory-like nodules. After emptying cyst and trying to separate it from peritoneum, found it was impossible; it broke off at the adherent portion like wet blotting-paper; pedicle was perfectly sound. Posterior to this large cyst there was a smaller, which he also removed. Pedicles tied with silk and Staffordshire knot, as taught by Mr. Tait; wound healed nicely; patient sank from exhaustion in sixty hours. There was nothing in this case to point to malignant disease, and had he seen her two months earlier he would not have to record her death, as it was quite evident malignant trouble was secondary in the tumour, and of very recent date.—Case 4: Parovarian Cyst (aged thirty). Menstruation regular; sent as a case of ascites. On opening abdomen, found large cyst; no adhesions, with very slight pedicle. Used Mr. Tait's trocar, and tied with silk. No drain; wound healed by first intention; temperature normal throughout.—Case 5: Strangulated Umbilical Hernia (age fifty-six). Old hernia strangulated thirty-six hours; reduced by abdominal section, and did a radical cure. He only referred to this incidentally, as he intended reading a special paper on this case at a future date.

Reviews and Notices of Books.

Ligaments; their Nature and Morphology. By JOHN BLAND SUTTON, F.R.C.S., Lecturer on Comparative Anatomy, Senior Demonstrator of Anatomy, and Assistant Surgeon to the Middlesex Hospital; Erasmus Wilson Lecturer, Royal College of Surgeons. London: H. K. Lewis. 1887.

IN this small and interesting volume, Mr. J. Bland Sutton has embodied a series of papers published in the *Journal of Anatomy and Physiology* for 1883 and 1886, under the title of "The Nature of Ligaments." In these papers the ancestry of various ligaments from a morphological standpoint was clearly shown, and Mr. Sutton has still further worked out his ideas and developed them in this treatise. His fundamental proposition that "the more important ligaments of the body are derived either from the metamorphosis and retrogression of muscles or the degeneration of osseous and cartilaginous tissues" is to a great extent true, and in many instances, as adduced by Mr. Sutton, a study of the comparative anatomy of these structures shows that the proof is ample and complete. We hardly think that the doctrine is so remarkable for its novelty as the author supposes, for although the references to it in published writings are few, yet the same idea has long been expounded to their pupils by many anatomical teachers in special cases, such as the coraco-acromial and the sacro-sciatic ligaments, and the plantar and palmar fasciæ. But the doctrine had never been fully worked out and insisted on until Mr. Sutton took it in hand, and to him every anatomist will feel indebted for many new examples and demonstrations of its truth and wider applicability. Although we are not prepared to accept some of his conclusions as absolutely demonstrated—e.g., with respect to the morphology of the long and short plantar ligaments and the constant relation of the supra-condyloid foramen to the lower epiphysis of the humerus,—we must give every credit to Mr. Sutton for the numerous facts which he has brought together from human and comparative anatomy in mutual explanation, and for the clear and lucid manner in which he has laid them before his readers. The little volume is one of the most interesting and suggestive works that has been written on any anatomical subject in recent years.

Sewage Treatment, Purification, and Utilisation. By J. W. SLATER, F.E.S., late editor of the *Journal of Science*, author of "Manual of Colours and Dye Wares." London: Whittaker and Co., and Geo. Bell and Sons. 1888.

THIS book is described on the title page as "a practical manual for the use of corporations, local boards, &c.," and we took it up in the expectation of finding in it an account of the many sewage systems which have been or are in use, but in this we have been disappointed, and in our opinion the title is a mistake. The author is evidently connected in some way with the Native Guano Company, for in two recent patents the names appear conjointly, and the present volume is a skilful and sustained argument in favour of the methods employed by the company. This being premised, we have much to say in praise of the book, for it is by no means certain that a fair though partial statement of one aspect of the case may not be very useful.

The earlier chapters deal with general questions, such as the composition of sewage, its dangers, the changes which it undergoes under natural conditions, and the older methods of sewage disposal. The account is clear, and upon the whole accurate, for the allusion on page 14 to nitrates and nitrites as constituents of sewage was doubtless an oversight. Then follow some remarks on water carriage in general, the watercloset, sewer air, traps, and such familiar topics. They cannot be said to possess much original value. The system which the author styles "Bazalgettism"—namely, the discharge of sewage into the sea or the tidal portion of a river—is dismissed in a few pages, and is rightly condemned as costly and wasteful. But we entirely dissent from the subsequent protest against the proposed conveyance of the London sewage to Sea Reach. That is exactly what ought to be done with it, although we quite agree that even there it ought not to be thrown in a raw state into the river. We next come to the various schemes for irrigation and land filtration. The arguments against them are ably stated, and in some cases valid, although in most they are overstated or even fallacious. On one point Mr. Slater makes a suggestion in which we entirely concur, and which we urged many years ago. Sewage irrigation should be suspended for at least a fortnight before any crop is reaped or gathered.

Chapter 9 opens the subject of Chemical Treatment, in which the author's sympathies are avowedly enlisted. The oft-repeated objection that chemical agents may clarify but cannot purify the sewage is fairly met. The fact is that neither of these alternative statements is entirely correct. That a large proportion of the fæcal, and therefore the most dangerous portion of the organic, matter can be removed by chemical treatment is certain, and it is equally certain that by a sufficient and judicious use of chemicals an effluent may be obtained which may be safely introduced into any water not used for domestic purposes. But it is none the less true that no precipitation scheme hitherto devised can in any true sense purify sewage. A well-devised irrigation scheme, with all its drawbacks, is in this last respect more efficient. The A B C process in its later forms is, as might be expected, eulogised in the subsequent pages (pp. 85, 86, 97, 108, 182). In this process impurities are removed, first by absorption, and then by precipitation. That it is tolerably successful no one who has visited the Aylesbury works can doubt; that it is perfect no one pretends. Its general adoption will probably be a question of cost, in which is involved the value of the dry manure obtained. On these last points we have no authentic information.

It must be added that on page 151 a good account of the sewage fungus (Beggiatoa alba) will be found, and that the book ends with a useful list of sewage patents.

OUR LIBRARY TABLE.

A Manual of Dissections of the Human Body. London: George Bell and Sons. 1888.—A new edition of this well-known work, by the late Dr. Carrington, has been prepared under the supervision of Mr. W. Arbuthnot Lane, the senior demonstrator of anatomy at Guy's Hospital, who has revised and considerably enlarged it by adding many new descriptions of dissections. Every important area of the body is now included in the work, and it will doubtless be found of value in guiding students in answering questions at the higher examinations, in which they are often set; but the numerical record of structures met with is apt to

be "crammed," and to take the place in the student's mind of an intelligent, even if necessarily short, description of their position and arrangement.

Elementary Practical Biology: Vegetable. By THOMAS W. SHORE, M.D., B.Sc.Lond. London: J. & A. Churchill. 1887.—This is a little work that is much needed, and we have no doubt will be found very serviceable in the upper classes of schools, and by those who are preparing for entrance into the medical profession. The plan of the work is such that, commencing with directions for cutting fine sections, it carries the student by easy but thoroughly practical steps through the various forms of vegetable cells and fibres to the Cryptogamia, and from them to the Gymnosperms and Phanerogams. In pursuing this course typical examples are taken as the Chara, Scolopendrium, Pine, Sambucus, and others. Then the kinds, forms, and arrangements of leaves are described; also the varieties of inflorescences and the different parts of the flower in many plants, both amongst Dicotyledons and Monocotyledons. No better introduction to the study of animal biology could be pursued than this. In this way a summer would be well spent by any young person of either sex who wished to obtain a clear conception of the vegetable economy.

The Geological History of Plants. By Sir J. WILLIAM DAWSON. London: Kegan Paul, Trench, and Co. 1888.—This well-illustrated little work is one of the now well-known International Series, and is intended to give a connected history of the vegetable kingdom from the earliest forms that have been recognised to the present epoch—from the Algæ of the later Laurentian and Cambrian formations to the Equiseta and Lycopodia, which attained their maximum development in the Devonian and Carboniferous periods, and so on through the Cycads and Conifers of the Cretaceous group to the Monocotyledons and Dicotyledons of the present day. No one could be better qualified than Sir William Dawson to undertake this work. An accomplished geologist and botanist, he has devoted many years of his life to the investigation of the fossil forms of vegetable life. He shows how difficult it is to distinguish the casts of the simpler forms of vegetation in the earlier periods from animal trails—the bodies, for example, named Rhabdicnites and Eophyton, supposed by some to be Algæ, being equally explicable as impressions formed by the trails of drifting seaweed, the tail markings of crustacea, and the ruts ploughed by bivalve mollusks, so that free scope is afforded for surmise and conjecture.

Les Courants de la Polarité dans l'Aimant et dans le Corps Humain. Par Dr. CHAZARAIN et CH. DÉCLE. Paris: 1887.—The statements made in this pamphlet require confirmation. Without having had an opportunity of testing their accuracy, they certainly seem to us rather surprising. The fundamental proposition is as follows: One pole of an electric battery, or one pole of a magnetised bar, applied on one side of a limb, of the head, or trunk in a vertical direction, does not induce the same changes as on the other side, but just the opposite, so that the muscular contraction and relaxation are reversed. The authors find that the whole of the left side of the trunk and head and the outer surface of the limbs are positive, whereas the inner surface of the limbs and the right side of the head and trunk are negative. They consider it has a direct bearing on metallo-therapeutics. The pamphlet is illustrated by a large number of diagrams showing the effects of the application in various parts of a horseshoe magnet.

Brain, a Journal of Neurology. Part 41. April, 1888. London: Macmillan and Co.—The number opens with a paper upon "Experiments on the Electrical Excitation of the Visual Area of the Cerebral Cortex in the Monkey" by Professor Schäfer, which is followed by a lengthy criticism of Professor Schäfer's results by Professor Ferrier, who regards the experiments of the former upon localisation of the special sense centres as inconclusive. To one uninformed this controversy only serves to prove the difficulties of such investigations, and to make him place more reliance upon careful clinical and pathological observations. Mr. St. John Bullen contributes a detailed account of "A case of Locomotor Ataxia, followed by General Paralysis of the Insane," in which the histology of the lesions in cord and brain is admirably worked out. Dr. Maguire has an interesting case of "Pseudo-sclerosis," and Dr. Bristowe writes on "Speedy Recovery from the Effects of Cerebral Embolism." Under the head of "Clinical Cases" are contributions by Drs. Buzzard, Sharkey, Horsley, Warner, Beach, Beevor, Savage, Battenham, and Flemming, a case of "Tumour of the Left Auditory Nerve" by Dr. Sharkey being, perhaps, the most interesting. Dr. Herringham gives a "Critical Digest" of the subject of Chorea in the adult and in the old. Reviews and abstracts complete the number.

The Waters of Plombières (Vosges). By Dr. BOTTENTUIT. London: Churchill. 1888.—This will doubtless be found by visitors a useful guide-book to Plombières and its neighbourhood. The information in it respecting the chemical composition of the waters of the various springs and the diseases in which they are believed to be useful is so meagre that we must infer that the work is intended for the use of invalids rather than of the profession. The principal diseases indicated are dyspepsia, certain uterine affections, gout, rheumatism, sciatica, paralysis dependent on alterations of the spinal cord or its envelopes, and certain diseases of the skin.

The Therapeutic Action and Application of the Waters of Aix-les-Bains, Savoy. By S. M. RENDALL, M.D. Second Edition. Pp. 31. Edinburgh: Livingstone. 1887.—This is the second edition of a paper read at the meeting of the British Medical Association at Brighton in 1886. It gives a very brief account of the springs and thermal establishment of Aix-les-Bains, and then discusses the action of the waters under the two heads of general and local. The indications and contra-indications for treatment at Aix are well and clearly stated. We do not think this pamphlet is likely to supersede some of the existing medical guide-books, but it might be advantageously studied along with them.

Longley's Student's Pocket Medical Lexicon. Edinburgh: Young J. Pentland. 1888.—This little work contains the correct pronunciation and definition of all words and terms in general use in medicine and the collateral sciences, the pronunciation being plainly represented in the American phonetic alphabet. An appendix contains a list of poisons and their antidotes, abbreviations used in prescriptions, and a metric scale of doses. The book is a useful one, and can be recommended to those for whose use it is primarily intended.

The Burroughs Duplicate Prescription-book.—To enable the practitioner to possess a copy of each of his prescriptions, Messrs. Burroughs, Welcome, and Co. have devised a small book, which contains a copying sheet, and which is easily carried in the pocket. The essential condition is to use either a hard pencil or a stylographic pen. The plan has much to commend it, whilst the very low price of the book is an additional recommendation.

A Brief Handbook to Rugby and its Schools. Pp. 40. Rugby: G. E. Over. 1888.—This *brochure* gives an account of the town of Rugby and its neighbourhood, with full information respecting the various preparatory schools in it. It also gives detailed particulars of the Rugby School, with the statutes now in force for its management. It appears to afford all the information likely to be required by parents or others who are called upon to decide the important question whether it is a suitable school for their boys

The Medical Student's English-German Conversational Manual (compiled by Dr. LOTH) is a very useful production. It is published by Simpkin, Marshall, and Co. The first part contains more than two hundred questions relating to illness. The second part gives more than one hundred sentences of the kind employed in giving medical advice There can be no doubt that this little work will be of service to students going abroad to study in the German schools.

Chambers's Encyclopædia. Edinburgh: W. & R. Chambers. A new edition of this work, which is rightly described as a dictionary of universal knowledge, is being issued. A large proportion of the articles have been entirely rewritten, the others have been carefully revised, and none of the old ones have been retained without scrupulous verification by competent authorities. Several additions and improvements have been introduced in this new edition, and as a book of reference it can be cordially recommended to all English-speaking students.

The Advertiser's A B C. London: White and Co.—We understand the demand for the 1888 edition of this useful directory has been so great that it has been found necessary to publish a second and popular edition of the work. This half-crown volume appears to contain all the matter included in the Library edition, with the exception of the indices.

Analytical Records.

POPULAR FOREIGN WINES.

(THE POPULAR FOREIGN WINE COMPANY, MOORGATE-STREET BUILDINGS, LONDON.)

WE have received from the above-named company samples of claret, port, and sherry, described, on the authority of Professor Redwood, as genuine foreign wines, which yet are sold retail at the low price of 9*d.* a bottle. We have submitted them, in respect of alcoholic strength &c., to analysis, with the following results, which are stated in parts by weight in 100 volumes:—

	Claret.	Port.	Sherry.
Alcohol	7·10	12·75	13·40
Solid matter ...	2·73	9·93	3·49
Ash	0·31	0·34	0·30

It will be seen that there is nothing in these figures inconsistent with the genuineness of the wines, although they are insufficient to establish it. The price at which the port and sherry are sold is, however, so low that we do not feel justified in expressing an opinion in regard to them. In flavour they are by no means bad.

AUSTRALIAN BURGUNDY (SELECTED). NO. 2: GOLDEN FLEECE.

(THE AUSTRALIAN WINE IMPORTERS, LIMITED, 53, CRUTCHED FRIARS.)

It is gratifying to find that the Australian wines improve every year. The wine we now notice is really excellent in flavour and bouquet, as well as in composition. It contains 13 per cent. by weight of alcohol, equal to 28 per cent. of proof spirit, and yields 3·1 per cent. of dry extract and 0·26 per cent of ash. It is therefore a very generous wine, and one which is sure to be popular when it is known.

ARCADIAN AERATED WATER.

This water is said to come from the Arcadian Mineral Spring of Wisconsin, U.S. The published analysis represents it as of remarkable organic purity, and as containing 30·5114 gr. of saline matter per gallon, of which 27·107 gr. are said to consist of the bicarbonate of calcium and magnesium. Our analysis does not entirely coincide with this statement, as the sample contained a much larger quantity of saline matter. We found the same ultimate constituents, but are unable to accept the figures of Prof. Haines of Chicago, who records to the fourth decimal place the weight in grains per gallon of such vague compounds as bicarbonate of iron. Such statements are misleading, as they assume an analytical accuracy which is absolutely unattainable. There seems no doubt that the water is not only organically pure, but in its general character salubrious.

ARCADIAN GINGER ALE: "THE IDEAL."

This is prepared from the above described mineral water, and of course possesses its advantages. Its extract is free from the pungency of capsicum, and has the flavour of genuine ginger. It is evidently made from pure materials, and is free from anything that can be described as adulteration.

HEALTH COCOA.

(HENRY THORNE & CO., LEEDS, AND POSTERN-ROW, TOWER-HILL.)

This cocoa is very soluble, and perfectly free from adulteration. It contains no foreign starch or sugar, and only a moderate quantity of fat. In the published analysis by Mr. Fairley the fat is given as 35·43 per cent., while we found 36·7 per cent., which is practically identical. The cocoa is excellent in flavour, and being perfectly pure deserves frank praise.

HUGHES'S SANTAL DISINFECTING FLUID.

(J. HUGHES, 78, THOMAS-ST., MANCHESTER.)

This disinfectant is described as "purely antiseptic" in its action. It is asserted that "it will render infected clothing perfectly safe to wear, and will make water that is impure sweet and fit to drink." According to our analysis the active agent is permanganate of potassium. If there be any other, we have failed to detect it, and are therefore unable to perceive any novelty in the new preparation.

CARR'S SCOTCH OATEN.

(CARR & CO., CARLISLE.)

This may be succinctly described as decorticated and crushed oats. We find it to be absolutely pure, and sufficiently free from husk. It is convenient in form, and a valuable article of food.

CARR'S SCOTCH OATEN AND MALT.

In this preparation the presence of barley malt can be readily detected by microscopical and chemical methods. From the physiological point of view the addition of malt is an evident improvement to oatmeal, as tending to assist its digestion. Opinions will, however, differ as to its flavour.

PATENT PERFECT FOOD: WHEATINA BISCUITS.

(SIMON HENDERSON & SONS, EDINBURGH.)

In these biscuits the bran is well removed, while the whole of the food constituents are retained. They are excellent in quality and flavour, and, according to our analyses, contain about 2 per cent. of mineral salts, including much phosphate. We are able to speak of them in terms of unqualified praise.

New Inventions.

AN IMPROVED SPLINT FOR THE TREATMENT OF THE ELBOW JOINT AFTER ITS EXCISION.

THE advantage I claim for this splint is that it allows passive extension, flexion, pronation, and supination of the forearm to be performed, whilst the limb is kept fixed to the apparatus. The side-to-side movement, so highly undesirable in this joint, and which is likely to happen when passive motion is made with the limb unsupported, will be checked by its adoption. It consists of a concave arm-piece (A), joined to the forearm-piece by a hinge joint (G), which can be tightened by a winged screw. The forearm-piece is made out in two parts (B and C), simulating respectively the ulna and radius. We are generally taught in anatomy that the ulna can only be flexed and extended on the humerus; I have noticed that besides this, in pronation and supination, its lower end describes part of a circle,

as if the bone was rotating somewhat round the segment of a cone, which apex would be directed upwards towards the elbow. To obtain this movement, and in order that B might follow and remain constantly in apposition with the ulna, I have interposed between B and G the joint F, which is regulated by a screw; C revolves round B through the joints E and D. By the use of the screw at D the forearm can be kept fixed in any position between complete pronation and supination. Any degree of flexion or extension

would be as well secured by tightening the screw at G. The apparatus is applied over the dressing to the inner aspect of the limb, and is kept *in situ* as an ordinary rectangular splint by means of bandages, with the use or not of the straps represented. As a preliminary step to passive movement all the screws are to be loosened. The instrument has been made for me by Messrs. S. Maw, Son, and Thompson, of Aldersgate-street, E.C.

EDWARD F. BOUR, M.R.C.S., L.R.C.P.L., L.S.A.

THE AMERICAN MEDICAL ASSOCIATION.

THE above Association has had a very successful and creditable annual meeting—the thirty-ninth—at Cincinnati, under the presidency of Dr. A. Y. P. Garnett of Washington. A very interesting account of the history of the Medical School of Cincinnati and its obligation to Daniel Drake was given by Dr. C. G. Comegys, who welcomed the Association in the name of the profession of Cincinnati, a city which had been honoured by two previous meetings of the Association, and which he described as the most central city of the nation for the purpose of the Congress. The Association numbers about 4500 members. The journal of the Association being a source of revenue, it was agreed that the increased receipts should be expended in improving that periodical. The attendance at the meeting, in spite of clouds and rain, numbered about 1500. We cannot pretend to give much detail of the proceedings. The most we can do is to give some idea of the general spirit of the meeting, and of the drift of the principal addresses. It may be accepted as a rule that the chief speakers chose the best topics and those which most interest the profession.

Dr. Garnett, the President, in his address on the "Mission of the American Medical Association," magnified the responsibility of the Association in regard to the condition of the medical schools in the United States. In this country we know too well the difficulty of raising the general education of the student and controlling the keen competition of the schools and the examining bodies. We know, too, the difficulty of securing any adequate attention from Parliament to the consideration of these difficulties, and the provision of remedies for them; but there can be no doubt that in the States evils of this sort exist to a far greater extent, and that there is actually no control, no central control, over them. The ratio of professional men in the States is 1 to every 580 of the population; and Dr. Garnett attributes this excess to "the multitude of medical schools offering to the educated and uneducated, by low fees and short terms of study, inducements to become doctors." This process has been so facilitated that, according to the President, there is an almost universal desire even among labourers to become doctors! Dr. Garnett offered various proposals for securing a higher medical education, which seem to be in the right direction, and the chief of which was the appointment of a committee on legislation for every State and territory to attend the sessions of the Legislatures to press every means of urging the passage of a law requiring that in the future the charters creating medical schools shall contain a clause requiring a higher preliminary education and a larger curriculum in candidates. We think Dr. Garnett entitled to great praise for his exposure of a great evil, and we trust that his proposals will be seriously considered by men who have the interests of medicine at heart in the United States. The President paid a just tribute to the late Dr. Flint in connexion with the recent meeting of the International Medical Congress, which he confidently predicted would be pronounced equal, if not superior, to any previous International Medical Congress. It is gratifying to notice a general admission that all traces of unpleasant feeling in the Association with regard to this subject has entirely disappeared.

In the address on General Medicine, Dr. Roberts Bartholow, of Philadelphia, mainly discussed therapeutics and the line of practice and study by which this branch of medicine is to be advanced. "He showed no quarter to homœopathy, lamenting that, while nearly extinct in Europe, it was still held up by social influences and misrepresentations in his own country." He urged simplicity of prescriptions, the use as much as possible of active principles rather than crude drugs, and the study of the physiological action of remedies. Homœopathy, he maintained, had nothing to do with the progress of modern scientific medicine; but the true therapeutic action of drugs was one of antagonism.

The address in Surgery, by Dr. E. M. Moore of Rochester, New York, and that in Public Medicine by Dr. Walcott, chairman of the State Board of Health of Massachusetts, were admirable performances. The latter, indeed, was rather long. But it was so full of information of the work of one of the oldest and most creditable State Boards of Health in America, and so lucid and forcible in its advocacy of the claims of Public Medicine on States and on the help of their Supreme Legislatures, that its length must be forgiven, if not forgotten. In Massachusetts, one of the most densely populated States in the union, there is a fairly kept record of vital statistics extending over forty-six years. The average death-rate from all diseases has not varied much in thirty-six years; but, thanks to the progress of preventive medicine, there has been an almost constant decrease in the class of zymotic diseases. In one year, for the first time in the registration history of the State, there has been no death from small-pox recorded. The death-rate from scarlet fever for thirty years has been reduced from 17·2 per 10,000 in 1857 to 1·7 in 1886. The deaths from phthisis have decreased, and seem to be decreasing. Pneumonia holds the second place in the mortality of Massachusetts, and has not diminished in relative frequency. The mortality from cancer has somewhat steadily increased—nearly doubled in twenty years. In some very forcible passages Dr. Walcott insists on the propriety of "the individual being compelled to give up his liberty to injure his neighbour," and of the national Government charging itself with responsibility for the public health.

We have left ourselves a most inadequate space in which to do justice to Dr. Moore's address on Surgery, and his triumphant vindication of antisepticism in principle, if not in detail. He places Lister on a level with Jenner, and, though fifty-one years from his student days, confesses to a glow of youthful enthusiasm, when, after resecting the knee joint under antiseptic conditions, he removes the dressing at the end of a fortnight, to find complete closure, every suture encysted, and not a drop of pus! He crowns his illustration of the triumphs of antiseptic surgery by quoting Volkmann's tables of the old mortality of compound fractures in the hospitals of Germany and England, whether preserved or amputated (38·5 per cent.), and Volkmann's report of seventy-five cases, with antiseptic treatment, without a single death. We must not stay to discuss how far Dr. Moore is right in saying that the glory of this time is that really great men are not so marked by a wide separation from their colleagues as in John Hunter's time. We are not troubled with too many John Hunters even now. But every successive one raises the whole character of Surgery and the profession of Surgery, until it threatens the very supremacy of Medicine.

THE LANCET.

LONDON: SATURDAY, JUNE 9, 1888.

THE great generous day for combining all sects and denominations in one grand religious effort is at hand. Hospital Sunday comes only once a year, and there is nothing in the calendar more worthy of being religiously kept. On other great religious occasions there is some difference to mar the catholicity of the day. But on this day no single note of discord can be heard. Jew and Christian, Churchman and Nonconformist, men whose faith is exceeding "broad," and those who worship in narrow and exclusive conditions—all agree for once. If there is any rivalry, it is in the effort to do most for the cause. This catholicity is too complete for some minds. There is something in it that to a certain class of people is bewildering. For one day to suspend controversy, to obliterate lines of distinction, to convert society into only two classes—those who have health and means and those who are disabled by disease and poverty, those who need help and those who can give it—is to such people a sort of shock. But they may safely be disregarded. The general sentiment is on the side of Hospital Sunday, and the great Judicial Voice comes down the ages: "Inasmuch as ye did it to the least of these my brethren, ye did it to Me." So powerful is this sentiment that we may safely conclude that, if the collection fail, it will fail largely from imperfect information. We may fail, and ministers of religion may fail, to convey an adequate idea of the Hospital and of what it does for sufferers—children, women, men. Men in health, too, are unimaginative and apt to be unsympathetic. Scarcely otherwise could a hospital fail as an appeal. It is not the "place" which MICHAEL conjured up before ADAM:—

> . . . . . "wherein were laid
> Numbers of all diseas'd; all maladies
> Of ghastly spasm, or racking torture, qualms
> Of heartsick agony, all feverous kinds,
> Convulsions, epilepsies, fierce catarrhs,
> Intestine stone and ulcer colic pangs,
> Marasmus, and wide-wasting pestilence,
> Dropsies and asthmas, and joint-racking rheums;
> . . . . . where Despair
> Tended the sick busiest from couch to couch;
> And over them triumphant Death his dart
> Shook."

Our hospitals, indeed, contain as great a variety of disease as is included in the above nosology. But how unlike they are to the lazar-house of MILTON. Death is not triumphant in them, but often meets with his match, and hope takes the place of despair. Pain is relieved; sight and sense are restored; disease is cured; limbs are saved. Many a child that was the light of its home is sent back to it again as lightsome as ever, and many a bread-winner is restored to his family after a mangling accident or an equally mangling disease. We ourselves lately recorded a hospital case in which sight was restored by a surgical operation after sixty years of blindness.

We publish this week two Supplements with very copious, and, in many respects, novel and most interesting particulars of the hospitals of London, obtained directly from the hospitals, collected by our own staff, but submitted to the authorities of each hospital for correction. We may suggest that it would be well for our readers to preserve this valuable collection of facts and figures, as a means of comparing the condition of medical charities in the present with that which may exist in future years. We venture to think that the ministers of religion, to whom the Hospital Sunday Fund owes so much, will find in these Supplements many a point with which to enforce the great plea for hospitals. It would not be easy in any equally convenient form to get so much information to impart about hospitals and dispensaries, and, though last, not least, convalescent homes, which the Hospital Sunday Fund very substantially subsidises. We should be unfaithful to the late Editor of THE LANCET, who was, with Sir SYDNEY WATERLOW, the originator of the Metropolitan Hospital Sunday Fund, if we spared either money or pains to uphold and advance it. The amount raised in any one year has hitherto not exceeded £40,607. The collection for three years past has appeared larger than it was, in fact, by the gifts and the legacy, amounting together to £3000, given in three successive portions by the late Dr. WAKLEY. Last year's collection was the largest yet made, in spite of the many competing claims of the Jubilee Year. It is exceedingly desirable that the sum raised should grow from year to year. The need grows. We do not want more hospitals. The public should positively refuse to sanction new ones. But the old ones must not be disabled for want of funds. The income of the hospitals falls short of their expenditure by £100,000. The deficiency is met partly by selling out stock and partly by restricting the number of beds. It will be seen from our Supplements that the authorities of one hospital, which ministers to a peculiarly painful set of complaints, could fill twice as many beds if they had the funds. *Ex uno disce omnes.* Many a case of disease drifts into hopelessness, or drags through a long and painful life-time, that might be healed if London charity were more active than it is. Medical skill was never more efficient, and never associated with more tenderness. Nursing was never more perfect and more considerate. Let charity do its share, and we shall help the sick to thank GOD, as well as those who are in health. Nearly all medical work in hospitals is unpaid, and not a little of it is the very glory of British medicine. This is the contribution of the profession to the healing of the sick poor. It is surely not too much to expect the public to supply the rest.

It is no answer to all this to say that hospitals have faults, and that they are abused. Hospital Sunday is not the day for applying a microscope to the faults of hospitals. It is a day to magnify the good they do, and the claims they have on all that have hearts to feel and imagination to guess what a refuge hospitals are to those needing the highest advice and skilled appliances. We will yield to none in criticising hospitals, but not on Hospital Sunday. And any man who allows criticism to get the better of his charity on this particular day must be neither a good Christian nor a good man. He makes the greatest contribution

to the correction of hospital abuses who gives most liberally to the support of hospitals.

In our last number we drew attention to the various subjects in the practical part of the student's curriculum, which had been under discussion at the recent meeting of the General Medical Council, and stated our views on the most important of them, and on which there is the greatest conflict of opinion—viz., that of pupilage. The second recommendation adopted by the Council dealt with "fevers"; viz., that students should be required to produce evidence that they have, so far as local circumstances will admit, studied fevers for not less than three months under recognised clinical instructors. As a similar regulation is at present enforced by some of the examining bodies in Ireland, where the treatment of fevers has been so fully studied and taught by GRAVES, STOKES, and other distinguished physicians, that it forms one of the most valuable chapters in the history of Irish medicine, and as epidemics of contagious fever are still unfortunately only too common in Ireland, we presume that this recommendation was urged in committee by representatives from that part of the kingdom. In Scotland of late years typhus and relapsing fevers have rarely occurred, and in England they are unknown to most practitioners under forty years of age. "Fevers," therefore, to the English student can only mean enteric fever, small-pox, and scarlet fever; and as we can scarcely imagine an examination in medicine which does not require from the candidate proofs of a thorough acquaintance with such every-day diseases, the recommendation seems to us superfluous. Enteric fever is taken into the wards of our general hospitals, and must come under the notice of, and be studied by, every clinical clerk; and no student, except under very occasional circumstances, could be expected to devote himself for three months exclusively to the study of the others.

By the next recommendation the student's midwifery experience is to be regulated. "Attendance for three months on the in-door practice of a lying-in hospital, or presence at not less than twelve labours, of which three must be conducted under the direct supervision of a registered practitioner," is advised. It is obvious that here the Committee were placed in a dilemma. In Scotland examining bodies now only require "attendance at" the insignificant number of six labours; but the raising of the number to any great extent—say to twenty—is impossible, from the fact that the proportion of gravid women who could be attended by, or in the presence of, students is not sufficient for the enormous number of students in attendance, if any supervision is to be exercised by the Scotch schools. As the case stands at present, a large number of the midwifery cases are attended in general practice, apart from the schools, and every increase in the requirement will make such arrangements more necessary; and so long as they are conducted "under direct supervision," such a course has many advantages for patient, student, and practitioner. The difference between recommending attendance at twelve cases of labour, with the personal conduct of three of these, and attendance for three months on the in-door practice of a lying-in hospital, is so great, and the impossibility of students in large numbers being able to avail themselves of the alternative are so obvious, that we presume the Committee only made the suggestion as a pious wish.

The lectures on Pathological Anatomy, with practical instruction, were also brought under review, and we cordially endorse the recommendation of the Committee on this point. We were under an impression that attendance at post-mortem examinations was made imperative by the regulations of every examining body in the kingdom, and that a summer course of pathological instruction—in many cases entirely practical—was a part of the student's curriculum at every medical school; and although it may be difficult to register attendances in the post-mortem theatre, or to carry out the ideal of compelling every student to make at least one post-mortem examination under the supervision of the demonstrator, yet stringency in this direction is more urgently required than in any other branch of medical education, for after leaving hospital it is impossible to obtain an adequate knowledge of morbid anatomy, which is really the foundation of medical science.

The Council has also acted wisely in again urging the importance of the study of Insanity on the general practitioner; and a certificate that this had been done should be required by every examining board, although here again it might be difficult to lay down a hard-and-fast line. The question of the restriction of the number of systematic lectures in favour of clinical work was deferred to a future meeting, and concerns principally the teachers and students in our northern schools, for the professorial method of instruction in its full severity can only be appreciated by those familiar with medical education in that division of the kingdom. In England and Ireland the lecture system is now very little, if at all, overdone. Finally, in regard to recommendations bearing on means of ascertaining regularity of attendance, of having served as dresser and as clinical clerk (already insisted on by every well-regulated examining board), of having attended wards or hospitals for special diseases, of regulating clinical instruction to limited numbers, &c., we cannot but express our opinion that such minute legislation is quite unnecessary, and that the authorities of the various schools must be trusted to some extent to lay down and enforce a proper course of hospital instruction, which cannot but vary in some details in different cases and under different conditions.

THE Government of India recently decided to suspend the operations of the Contagious Diseases Acts in Madras, Bombay, and Bassein, where they had been for some time in force. In a recent despatch to the Governor-General of India from Lord CROSS, Secretary of State, his Lordship, while expressing assent to this course, observes that, as his Excellency was of opinion that the operation of the Act had, on the whole, been beneficial in those places in which it had been in force, he (Lord CROSS) requested that the effect of the suspension of the Acts may be carefully watched, and that he might from time to time be informed of the result. Passing on to the consideration of the Cantonment Act, Lord CROSS observes: "The maintenance generally of the cantonments in a proper sanitary condition, the prevention and cure of ordinary disease, and the preventing the spread of venereal disease, are equally matters of

the highest importance, and all infectious disease ought to be dealt with as a question of policy. No examination should be imposed upon women compulsorily; but, on the other hand, no person who is reasonably suspected of being in a condition likely to spread the infection of any dangerous disease whatever ought to be allowed within the cantonment except in hospital, and no one who is so suspected, and who objects to such medical treatment as may be necessary, ought to be allowed to remain within the cantonment at all." It appears that inquiries instituted by the Indian Government into the operation of these rules, and the experiment tried in 1885-1886 of suspending their operations and closing the lock hospitals in fifteen of the large cantonments, showed the necessity of some regulations for the repression of prostitution and the prevention of venereal disease within cantonments. Lord CROSS considers that the rules require careful revision, "and in such revision the principle should be steadily borne in mind that the efforts to control prostitution and to mitigate its attendant evils should not be developed into anything that can assume the appearance of an encouragement of vice by the Government and its officers. There should be no regulations which can be justly construed into a legalisation of prostitution." He also hopes that it may be found practicable to restrict the exercise of the authority given in Section 31 of the Act of 1880 within the narrowest limits, especially in the neighbourhood of towns. The attitude taken by Lord CROSS is exactly what might have been expected of him. When he held the office of Home Secretary he supported the Contagious Diseases Acts as then enforced in this country, and on several occasions voted against their repeal. But he regretted that a circular should have been issued from the army headquarters in India which implied that a certain number of prostitutes were a necessity of each regiment. This the Home Government severely condemned and immediately suppressed. In all that has appeared in THE LANCET respecting the Contagious Diseases Acts, both at home and abroad, it has always been steadily maintained that the objects of these Acts were to prevent disease and to promote, so far as was possible, the social and moral improvement of the degraded classes of women who were mainly the cause of these diseases being spread. In India and other places where "caste" prevails, this latter movement is next to impossible. But, while it is the duty of medical journalists and practitioners to urge the importance of endeavouring to prevent or cure all diseases, venereal included, it is no part of their duty, and still less their inclination, to appear as apologists for vice, or to sanction the idea that soldiers, sailors, or civilians must of necessity be vicious. On the contrary, as Sir JAMES PAGET has so eloquently observed, "Chastity does no harm to mind or body; discipline is excellent; marriage can be safely waited for"; and, though unfortunately perfect continence among men is comparatively rare, it nevertheless does exist more than is generally believed, and with the greatest advantages—physical, moral, and mental. The Church well describes it as a "gift," and infers that it is not generally possessed; hence the importance of marriage. But, while wishing to protect medical men from the base insinuation too often levelled against them—that by supporting the Acts they sanction fornication, an insinuation as false as it is base,—it must not be inferred that repealing the Acts in India and preaching chastity, however eloquently, will extinguish the "social evil." On the contrary, this has largely increased in those naval and military districts where the Acts were formerly in operation, and at the present moment it is causing much trouble to the civic authorities in Liverpool, which city was never subject to the Acts. Ignoring it has failed; tacitly recognising it has also failed; attempting to stamp it out has failed worst of all three. Like every other evil, it must be faced honestly and boldly. It need not and ought not to be licensed; but it can be, and must be sooner or later, regulated. The regulations of cantonments in India, according to the principles laid down by Lord CROSS, might, with some modifications, be most advantageously applied to every locality where the social evil exists.

THE post-graduate lectures on Practical Legal Medicine delivered by Mr. PEPPER, and published in THE LANCET of Aug. 27th, Sept. 17th, and Nov. 6th last respectively, are of the greatest interest, and deserve the careful attention of all general practitioners. To them must be added the very practical address on the Duties and Remuneration of Medical Witnesses, delivered on March 18th last at the East London and South Essex District of the Metropolitan Counties Branch of the British Medical Association, which appeared in THE LANCET of the 19th ult. These supply the general practitioner with what has been felt to be a great want. If every practitioner who is called upon to make a post-mortem examination for the coroner will carefully study these lectures and carry out their precepts, great advantages will follow. One will be the more careful practical study of forensic medicine, which, as has been previously remarked in these columns, has not maintained in England the reputation which it has secured on the Continent, or even in Scotland. Another good result of greater carefulness in the making of post-mortem examinations and recording all the appearances of each will be the saving of much scientific material which is at present wasted. THE LANCET has always maintained the rights of general practitioners, and will continue to do so. One of these rights is to appear as witnesses in the coroner's court, and to make post-mortem examinations. But, like other rights, it has its responsibilities, and no practitioner need undertake this duty unless he wishes and is prepared to devote to it sufficient time and attention. Moreover, it would be well for all who are called upon as medical witnesses in cases involving a criminal charge against anyone to secure the co-operation of a second examiner, who should be an expert in medico-legal necropsies. The advantage of having a second opinion in any serious case of illness is generally admitted. Why should not this rule apply to those duties which have to be performed after death has taken place? Why should not the forensic physician or surgeon be called in consultation as much as the consulting physician or surgeon, the oculist or the gynæcologist?

Mr. PEPPER'S lectures show the importance of concentrated attention upon all the medical details of the Coroner's Court. His advice to house surgeons, on the importance of reporting to the coroner all cases which should be referred to him, is excellent, and will be profitable to many practitioners. To please their patients and prevent

an inquest, some have been unwise enough to give certificates in cases of death from injuries and other cases which ought to have been reported to the coroner, the consequences being an exhumation of the body and an inquest after all. Very good, also, is the advice given respecting insurance against accidents and the duties of medical men relative thereto; also in cases where claims for compensation are made. The importance of giving accurate evidence as to fact and opinion at the inquest is also dwelt upon, and very properly, medical witnesses being too frequently apt to think that the evidence given before a coroner is of less consequence than that before a judge of assize. As Mr. PEPPER shows, the depositions are always preserved, and will be produced at the trial, when it will be, as he remarks, to say the least, inconvenient to amend the evidence there. Cases have frequently occurred where the inquest appeared to be the veriest formality, the *corpus delictum* being that of a newly-born infant or of a man or woman unknown, and the proceedings totally without interest. Subsequently circumstances have occurred which have led to a very important trial, and even a *cause célèbre*. "What is worth doing at all is worth doing well" applies especially to all medico-legal duties, from the coroner's to the highest court of all. Passing on to more special details, the remarks on scalp wounds and bruises are very important, though it is remarkable that any medical witness should in these days assume that clean-cut scalp wounds must have been caused by sharp weapons, still more that the mistake should be, as Mr. PEPPER says it is, a common one. It might have been thought that the merest tyro would have seen perfectly clean-cut wounds caused by fists, by pokers, and by falls on a flat surface, such as a floor. It is an additional proof of the importance of practically studying forensic medicine, even in its most elementary details.

In these lectures the important subject of criminal abortion —a hideous crime which is only too frequent, but seldom detected and punished—also comes under notice. Almost every large town or city has its abortionists, whom experience has made skilful both in the execution of their dire work and in escaping detection. And yet it is only a few years since one of these men was convicted at Liverpool for the murder of a woman on whom he had attempted to procure abortion in Manchester, and who died in consequence. The jury recommended him to mercy, but in ignorance of the fact that he had already served five years' penal servitude for practising abortion; and he was duly executed. It is very important that in all these cases the post-mortem examination should be made as soon after death as propriety will admit, in order that the injured parts should be seen before putrefaction commences, since this is apt to occur soon in these cases, and in the parts which it is most important to examine.

Another salient point in this connexion is the post-mortem appearances of the stomach and intestines in certain forms of violent and natural death. It has frequently happened that a post-mortem examination has been made and appearances more or less marked of death from natural causes have been found by the surgeon. The stomach and intestines are seen to be intensely red, and the examiner, concluding that this indicates poisoning, has asked for an analysis. The result is negative. The cause of death is decided to be natural. The coroner grumbles at the (to him) needless expense, and a general feeling of distrust against medical evidence is the result. All this may be avoided by a careful study of the symptoms during life and the appearances after death. To the cases given in these lectures we may add one more. A married man of the working class, whose life was insured for a considerable sum, died under very suspicious circumstances. He was seen by a surgeon, who found him insensible, in which state he remained till his death. At the post-mortem examination it was found that one of the vessels composing the choroid plexus had given way, forming a clot, which accounted for the symptoms and for the death. The stomach and intestines were found to be red, and there were other appearances so indicative of irritant poison that an analysis was made, but with a negative result. The appearances were probably due to vomiting.

The lectures on medical jurisprudence are now in full course in all the British medical schools. Murders and other crimes of violence are occurring with painful frequency; each of these cases possesses its points of medico-legal interest, and it will enhance the value of these lectures, both to the lecturer and his class, if they teach legal medicine practically. Anatomy can only be learned in the dissecting-room; chemistry in the laboratory clinical medicine and surgery in the hospital wards. Legal medicine comprises many branches of medical study, and every department of medicine and surgery. Much may be learned from such works as TAYLOR'S, TIDY'S, OGSTON'S, and GUY and FERRIER'S; much may also be learned from a painstaking lecturer. But it is in the out-patient room, the post-mortem theatre, in courts of law, and in the record of all daily occurring cases of medico-legal interest that medical jurisprudence can be practically studied. The making of post-mortem examinations for the coroner has frequently to be conducted under the most unfavourable circumstances—in attics, garrets, and cellars, in the most limited space, and without any of the conveniences of the hospital post-mortem room; hence the importance of acquiring skill in conducting them. Every medical school has its material for practically illustrating the summer course of lectures on forensic medicine, and these should be fully utilised.

With regard to the subject of remuneration, Mr. PEPPER shows even more clearly than has been previously done how very inadequate this is. What is mainly required is that those in private practice should have larger remuneration than the resident medical officers of institutions. To the former, having to appear as a witness means positive loss, more especially if the assize town be far distant. The scale on which physicians and surgeons are remunerated for attendance before Parliamentary committees—viz., from two to three guineas a day for attendance, with a guinea a day for expenses, and two days allowed for travelling—would be a good model to select. The Treasury, too, remunerates medical witnesses with greater approach to liberality. At present, when there is so great a disposition to cut everything down, we fear that it will be useless to urge an increased scale of fees, though eventually it may come. Meanwhile we would again urge upon all professors, lecturers, and students of medical jurisprudence, the import-

ance of teaching and studying this important branch of the second summer course in the only way in which it can be really learned—i.e., practically.

THE recent prevalence of small-pox in Sheffield and the comparative immunity of Leicester from this disease afforded an opportunity for those opposed to compulsory vaccination to raise a discussion on this subject in the House of Commons last week. The case of the anti-vaccinationists was ably represented by Mr. PICTON, who in a temperate speech urged the necessity for inquiry into the circumstances which gave rise to the serious outbreak which has cost Sheffield more than six hundred lives.

Mr. PICTON'S contention that the outbreak deserved investigation will be unhesitatingly accepted by all who value human life and who are desirous of learning the lessons which every epidemic teaches; the only question really at issue was whether this duty should be undertaken by a skilled officer inquiring on the spot, or by a committee of the House, which would necessarily have to depend upon the examination of witnesses in London for information upon which to base its conclusions. Mr. RITCHIE found no difficulty in convincing the House that the inquiry instituted some time since by the Local Government Board was the only means by which the truth could be properly sifted, and we may assume that the matter will now rest until the report of Dr. BARRY has been published.

Mr. PICTON in his argument discussed two subjects at the same time: the one, the amount of protection afforded by vaccination; the other, the local machinery which is required for preventing small-pox from assuming epidemic proportions when it is introduced into a community. The value of vaccination is best ascertained by an inquiry into the relative number of attacks of small-pox or of deaths from this disease occurring among a vaccinated and an unvaccinated population living during small-pox prevalence under precisely similar conditions. For this purpose the inquiry at Sheffield will be sufficient, and we may assume that the report, which it is hoped will be presented as soon as possible, will show what was the condition as to vaccination of all who have died. Mr. RITCHIE has already given important information on this point, and has shown that the evidence Sheffield will afford is in accord with that obtained in other small-pox epidemics. Thus, of the 82,958 vaccinated children under ten years of age in Sheffield, 207 were attacked, or 1 in 400, and of the 207 only 2, or 1 per cent., died; while of 4366 unvaccinated children at the same age-period, 146, or 1 in 30, were attacked, while 70, or 48 per cent., died. Vaccination therefore had protected Sheffield against small-pox so far that but for this protection it is probable that, instead of 148, as many as 1330 children would have lost their lives from small-pox, in addition to those above this age who would have perished.

The proposal to abandon compulsory vaccination, and to depend upon notification and isolation, was based upon the success which has attended this method in Leicester, and it must be at once admitted that this town has hitherto escaped from any severe penalty for its neglect of the enforcement of the Compulsory Vaccination Acts by its energetic adoption of these measures. It must be remembered, however, that it takes a number of years for the population to revert to a condition of universal susceptibility to small-pox, and that it is only the children born during recent years who have escaped vaccination; it is therefore too early to assume that Leicester can continue to rely upon its present method. We have often expressed the opinion, which we still hold, that the town will eventually accumulate sufficient susceptible material for a terrible visitation of small-pox, and in this connexion Mr. RITCHIE well pointed out that the experience of Montreal in 1885 might usefully teach Leicester people the risk they were incurring. Montreal, indeed, had only learnt the value of vaccination after an epidemic which caused in that town more than 3000 deaths in a population of under 200,000, or five times the recent mortality in Sheffield, which has a population of more than 300,000. The opposition to vaccination was abandoned in Montreal when this calamity had occurred, and fully 80,000 persons were vaccinated in three months. It cannot be anticipated that Leicester will have a different experience, although, as in Montreal, years may elapse before an epidemic occurs, but the loss of many hundreds of lives is a terrible price to pay for "the luxury of disobedience."

To compare Sheffield with Leicester, a more detailed statement of local circumstances is required than appeared in the debate. It will be recollected that Sheffield had the misfortune to have situated in a thickly populated district a small-pox hospital, and the influence of such institutions thus placed has to be borne in mind. It may well be asked how Leicester would have fared if the isolation of its small-pox cases, of which it is justifiably proud, had been effected in a hospital similarly situated. The debate raised by Mr. PICTON will have done much good if Mr. RITCHIE'S speech be widely read, and if his reference to the reports of Dr. TOMKINS, the medical officer of health for Leicester, should lead to their receiving more serious consideration.

Annotations.

"Ne quid nimis."

THE COUNCIL ELECTION AT THE COLLEGE OF SURGEONS.

THE forthcoming election of Councillors at the College, to be held on July 5th, will, in all probability, be a historical one, from the circumstance that it promises to be the last of the meetings held under the old *régime*, for in 1889 (as we hope it may be) the conditions on which the franchise is now exercised are to be somewhat modified. Under the new Supplementary Charter proxy voting is to be established, and a considerable extension is to be granted inthe scale of eligibility for future candidates on the Council; both innovations carry with them the germs of future reform. We would fain add that Members of the College were associated with the Fellows in their duties of voting. This self-evident proposal, however, on the part of the Members is not to be accepted without further fighting. The retiring Councillors are Mr. William Cadge, Sir Joseph Lister, and Mr. Thomas Bryant, their Fellowship seniority dating 1848, 1852, and 1853 respectively; all three Fellows were elected on the Council in 1880. We are disposed to think that a yet further infusion of new blood into the Council chamber would be advantageous to the College. The virtually permanent oligarchy at Lincoln's-inn-fields has shown itself to be out of touch with current professional opinion, while it is

notorious how visibly affected by the instinct of self-preservation members of Council are on reaching the steps of the presidential chair, their addresses being then made to the Council, and not to the College. Fellows, who are really anxious for reform, must vote "solid" for reformers. We are much mistaken if, under existing circumstances, the Members do not indirectly show their power by influencing, in every legitimate way, the votes of Fellows at the July election. Though we disclaim any desire that all members of Council should think one way, yet we should welcome as a candidate a truly representative man of the new order of ideas; a man of high character and surgical excellence; a man whose utterances convey no uncertain sounds; such a man, for example, as Mr. Wm. Paul Swain of Plymouth, whose election would give a steady impulse to a wider measure of reform, as well as satisfaction to an influential number of Fellows and Members of the College. We would remind those Fellows who may wish to be candidates for election into the Council that applications must be sent in before June 11th. From a letter which appears in another part of our present issue it will be seen that Sir J. Lister has decided not to seek re-election.

MICROBES IN SKIN AND SUPPURATION.

DR. V. A. KRYLOFF, who has been investigating, in Professor Ivanovski's anatomical and pathological laboratory in St. Petersburg, the causes of acute suppurative processes, has obtained some interesting results by rubbing antimonial ointment and croton oil liniment into shaved patches of the skins of different animals. When these substances were rubbed into the skin of guinea-pigs and rabbits, no pustules, as a rule, were produced; but by means of very energetic rubbing a dry gangrene of the skin was caused, in which no micro-organisms were to be found—a condition apparently due to an absence of pyogenic organisms in the skin of these animals. In one case, however, there was pustulation, and staphylococcus aureus was found. When a similar experiment was tried on dogs, pustulation always followed, and staphylococcus pyogeneus albus was invariably found; this coccus existing, as it would seem, in the skin of the dog, otherwise it would be difficult to explain why other staphylococci were not found. Cultures were also prepared from the normal skin of dogs which, injected into other animals, produced abscesses, and in the case of rabbits proved rapidly fatal. The conclusion that Dr. Kryloff comes to is that the production of pustulation by external irritants depends, in part at least, on the pre-existence of pyogenic organisms in the skin. In the case of dogs, he thinks that they must be localised in the deeper layers of the epidermis, as thorough disinfection was a very difficult proceeding; and unless the organisms lying deeply were destroyed, their power of provoking suppuration was not arrested.

THE CLOSURE OF WELLS.

THE powers of local sanitary authorities to close polluted wells has recently been seriously questioned in two cases which came before the magistrates for decision. The one occurred at Birmingham, the water having been analysed by Dr. Alfred Hill, the medical officer of health for that borough, the other at Enfield, the analysis having been performed by Mr. Lloyd, the public analyst. In both the water was undoubtedly contaminated, and the only question really at issue was the character of evidence required for the application of the 70th section of the Public Health Act. This section empowers the magistrates to make an order for the closure of a well where the water is so polluted as to be injurious to health. It is obvious that chemistry cannot do more than show that water of this nature is dangerous to health, and that nothing less than evidence of a physiological character that health is suffering would enable a conscientious witness to say that the water was "injurious." Upon this point the evidence for the prosecution broke down. It is much to be regretted that in the Birmingham case the local authority were without legal aid in the conduct of their case, for it would have enabled them to argue the question whether the words in the second paragraph of the section were not sufficient to empower the court to make the necessary order. This section authorises them to make "such other order as may appear to them requisite to prevent injury to the health of persons drinking the water," and it might be assumed, therefore, that evidence of water being *dangerous* to health would be sufficient for their purpose. The high estimation in which Dr. Hill is held both as a chemist and as a health officer renders it unnecessary to consider the chemical composition of the water concerning which he gave evidence; the case failed purely on legal grounds, and if the decision be correct in law, an urgent need is shown for an amendment of the Public Health Act. If further evidence is required, it is to be found in the Enfield case, which is substantially the same as that at Birmingham, except that at Enfield it apparently might have been shown that four cases of typhoid fever occurred in one of five houses supplied by the well in question. Local authorities still have powers, under the 62nd section of the Act, to require owners of houses to obtain a proper water supply under certain limitations of cost where any of these houses are deficient in this respect; but this section appears intended to facilitate rather the provision of a supply by a public company than that of a private well; in country districts where a supply from a public source cannot be obtained, the faulty wording of Section 70 will probably from this time give considerable trouble, unless the ruling of a higher court decide that it is sufficient to prove that well water is dangerous without necessitating the evidence which can only be obtained when injury to health has definitely occurred.

SCHOOL HYGIENE IN GERMANY.

EVEN more than in the British Isles, the question of school hygiene is engaging the attention of physicians, teachers, and legislators on the Continent, Frankfurt-on-the-Main being the latest seat of a Congress specially convened for its consideration. Dr. Siegert, an eminent teacher of Berlin, read a paper on the subject, in which he showed the necessity for medical school inspection (such, for example, as France possesses), on account of the high proportion of sickly pupils, which in Denmark amounts to 29 per cent., and in Sweden to 44 per cent. He urged the appointment of school physicians, but would make their duties less multifarious on the one hand, and less those of the specialist on the other, than is generally demanded of them. They need not, for example, be all specialists in eye diseases, as is sometimes recommended; but each should have given official proof of his fitness for the post. Dr. Siegert adduced seven propositions as worthy of the attention of the sanitary reformers of schools, and these were warmly seconded by Dr. Spiess, the city medical officer and sanitary councillor of Frankfurt, and approved *nemine contradicente*. They were: "1st. Conservation and promotion of the health of the young in schools, for which hygienic inspection is necessary. 2nd. A commission, formed by the State, and consisting of physicians, architects, engineers, and schoolmasters, to conduct investigations on the health condition of school children, to give suggestions for the practical carrying out of school hygiene, and to establish the principles by which special 'school physicians' (*Schulärzte*) shall be guided. 3rd. The school physician must be a practical official who has made school hygiene an object of special

study. 4th. His appointment shall be vested in the State. 5th. He shall have charge of a more extended circuit than has hitherto been attempted, as experience has shown that school physicians for limited areas of population are superfluous, and, from the teacher's point of view, not desirable. 6th. At certain periods the school physicians of a province shall meet for purposes of common deliberation with the State-appointed commission. 7th. School physicians will be able to work with advantage to their *clientèle* only when school hygiene is a subject of examination for schoolmasters before entering on their duties, and when the laws of health find their proper place in the scholastic curriculum." Dr. Siegert's programme is a comprehensive and well-considered one, and (subject, of course, to such modifications as experience may interpose) may soon be translated into practice—approved as its principles mainly are by leading medical men in Germany and also by the Prussian Education Office.

THE LOCAL GOVERNMENT BILL.

THE Maidstone Local Board have resolved to memorialise MR. RITCHIE to reject Sir Lyon Playfair's proposed amendment to the Local Government Bill, which provides for medical officers of health being appointed by County and not by District Councils. The grounds for this decision are that Maidstone under the present system "had become the healthiest borough in the United Kingdom." Unfortunately, however, Maidstone is not England, and the question at issue is what is best for the whole country; for we are bound to assume from the above statement that the sanitary condition of all the other boroughs is worse than that of Maidstone, and the state of England must therefore be regarded as sadly needing improvement. It deserves to be noted that the resolution was not carried until after an animated discussion, in which Mr. Alderman Potter protested against such a motion being sprung upon the board without notice, and urged that there was much in Sir Lyon Playfair's amendment which would tend to the general good. It is, of course, not to be expected that the alteration in the public health service which is proposed will be universally acceptable to all sanitary authorities; and in districts where sanitary duties have been efficiently performed it may appear at first sight a little hard to remove from the district authority the right to appoint its own medical officer. The medical officer of health, however, is differently circumstanced from other officials, inasmuch as his duty is rather to advise than to administer; and if Sir Lyon Playfair's amendment were accepted, it would simply have the effect of enabling every authority to secure more highly skilled advice than is possible for many under existing circumstances. The authorities would therefore be gainers and not losers, and this they will doubtless see.

THE REMOVAL OF HOUSE REFUSE.

IT is stated that the Whitechapel district has introduced the pail system for the removal of house dust, and that when the arrangements are fully completed a daily collection will take place, thus allowing no garbage to remain reeking in dustbins, to the risk and annoyance of the inhabitants. We trust that the example of Whitechapel may be followed by other parishes, for the very general failure in the metropolis of the present arrangements has been a standing reproach to London. The existence of large dustbins implies the retention of house dust until it suits the convenience of the contractor to remove it. In winter, and especially at the termination of his period of contract, it suits his convenience to neglect his duty to the detriment of the householder, who is none the less obliged to pay his rates whether he receives the assistance for which he pays or not. Whitechapel is not the only East-end parish which is replacing the old fixed dustbin by a movable receptacle. The vestry of Bethnal-green, acting under the advice of their able medical officer of health, Dr. G. P. Bate, has already made considerable progress in this respect, and it may be hoped that the civilising influences of the East-end of London will at length be felt in the western districts, where the inhabitants have still to struggle against the difficulties created by the neglect of the dustman.

ST. BARTHOLOMEW'S HOSPITAL AND MEDICAL MISSIONS.

A SOCIETY has been formed at St. Bartholomew's Hospital in order to meet an urgent want under which it has recently been learnt that a number of former students who have gone out from that hospital as medical missionaries are suffering. It appears that, owing to a dearth of funds, several important Missionary Societies, who have accepted and still seek the services of medical men for the purposes of mission work, are unable to provide them with drugs and instruments; and at the inaugural meeting of the Society referred to some medical missionaries bore testimony to the grave disadvantages under which they found themselves placed in remote portions of Asia and Africa, when they were without the first essentials for carrying on their work. One of them explained that for years he had been entirely dependent for his drugs on such funds as his own personal friends could collect for him; and another detailed his efforts to secure old steel bands and the zinc linings of packing-cases with which to manufacture trusses and prepare lotions &c. for his patients in the interior of China. A number of those present have, with the support of some members of the staff and of a few former students, decided that an effort shall be made to supply for the future the needs of such Bartholomew men as have already, or shall hereafter, become medical missionaries; annual contributions have been promised for the purpose, and a first instalment of help has been forwarded to one of their colleagues now in Eastern Africa. From the information as yet available, it would appear that at least £60 a year will be required to supply drugs and instruments to each medical missionary, and the officers of the society are anxious to hear of Bartholomew men who will aid in thus keeping touch with their old colleagues in distant parts of the world, and in removing the serious disability under which they labour. The hon. treasurer is Dr. Thorne Thorne; and the hon. secretary, to whom communications may be addressed at the hospital, is Mr. E. W. G. Masterman.

"TO WHAT BASE USES"!

ANYTHING more absolutely matter of fact and free from the most pardonable traces of sentimental weakness than the last suggestion as to the disposal of the dead can hardly be imagined. The chemical decomposition carried on by Nature underground is too slow to content the advocates of cremation. The latter process, again, is apparently too wasteful of man's component elements to satisfy the utilitarian prudence of a more thrifty reformer. It cannot certainly be said of the plan preferred and lately advanced by a Scottish chemist, that it lacks the merit of economy. What the cost of its working may be we cannot say, but it is abundantly clear that the dead will not be suffered to return to the earth whence they came until every obtainable scrap of profit has been extracted from them. According to one method suggested by this practical genius, the corpse is to be broken, pulverised, and afterwards chopped into mincemeat by means of machinery. The pulp thus obtained will then be dried by steam heat at 250°, or by a pressure of thirty pounds to the inch, in order to reduce it to a state in which it can be handled. "Once in this con-

dition," it is urged, "it would command a good price for the purpose of manure." Another project of similar character aims at utilising the body by boiling it, the fats extracted serving for soap manufacture, and the residue for fertilising purposes. But the height of usefulness is not reached until the art of decomposition has been carried a stage further. Distillation is to be called into play, and, thanks to the retort, the living world will be a gainer by definite quantities of gas, tar, charcoal, ammonia, and even aniline and carbolic acid obtained from the bodies of the dead. Most of these substances, we may suppose, would be produced in remunerative amounts, and in that case it may be questioned whether civilisation has not, by sanctioning burial, unduly straitened the means of comfort allowable to living men. The originator of the alternative methods above described appears to think that it has done so. The world perhaps will come to think with him when in the utter purity of avowed materialism no lingering shade of feeling clouds the minds of men. Thus far, however, we are certain that most intelligent persons can have little sympathy with a scheme which is wanting in every trace of respect for the dead, and so totally inexcusable on any ground of public necessity.

THE SPREAD OF SMALL-POX.

THE manner in which small-pox is often spread is well exemplified by a story which comes from Bolton. A man who had been at a volunteer encampment was sent to his home ill. He presented himself to the borough medical officer, who found that he was suffering from severe small-pox, and sent him to the hospital. He had, however, unfortunately communicated his disease to several persons, and it was found that his wife had died a fortnight before from the same malady. An interesting part of the story is that the bedding and furniture had been sold in the district. If this be the case, it is probable that more will yet be heard of small-pox at Bolton. In all probability, the Bolton sanitary authority will have some explanation to give as to the alleged sale of the bedding, for it can hardly be expected that a town which compels notification of cases of infectious disease would allow bedding used by a small-pox patient to be subsequently sold.

MUSTARD PLASTERS AS A PUNISHMENT FOR MISCONDUCT.

OPINIONS continue to be divided respecting the educational value of physical punishment and the best means of applying it when required. It is not, indeed, to be expected that the subject should fail to excite discussion. The question is not one which is likely to be settled on purely theoretical grounds. On the other hand, a too practical view of its uses is likely to have a mischievous effect by removing such needful restrictions as render discipline wholesome by tempering its severity. Fortunately, we do not, in regard to this matter, stand on the threshold of invention. Experience has proved the necessity of "the rod" when judiciously applied, and common sense, a capable and moderate monitor, has long ago analysed that comprehensive term into a variety of component parts, each of which is a safe and sufficient means of correction. The guidance of this authority has clearly been ignored, however, in the selection of one mode of chastisement which has recently found favour with some of our American cousins. This consists in the application of a mustard plaster to the back of the youthful delinquent. Now, to the use of mustard as a means of treatment in disease we cannot possibly raise any objection. Its position in the scale of punishments is, however, altogether different, and is certainly objectionable. As a remedy for misconduct it is said to be effectual, but we must remember that its action is by no means as easily controllable as the strokes of the cane or birch. To blister or even to redden a boy's back in this way is to make him, at least in some degree, an invalid—a result which is not aimed at and is certainly undesirable. The new method of correction, therefore, will not do. It is too harsh to be sensible, and we can only wish for it a speedy abandonment.

THE EMPEROR OF BRAZIL.

FROM Milan a correspondent writes as follows:—"Dom Pedro, though not gaining strength so steadily as could be wished, has yet manifested such general improvement, particularly in appetite, that his physicians have seen fit to-day (4th inst.), to transport him from the Italian to the French side of the Alps. Every precaution had been taken to render the journey as little fatiguing and irksome as possible, Dr. Semmola having tested and approved in person the portable bed in which his Majesty was conveyed from the Hôtel de Milan to the tram carriage, and from that to the railway. In the train itself, a saloon carriage, fitted up with every comfort and convenience, has been so adapted as to minimise any shock to which the illustrious patient could be subjected, and it was therefore under the best auspices that the Emperor at seven o'clock this morning took a courteous farewell of the crowd of well-wishers at the station, and started on the journey that is to close at half-past seven this evening at Aix-les-Bains. In addition to his accomplished and devoted body-physician, his Majesty will be vigilantly tended *en route* by two of the ablest consultants of France and Italy, who will have at instantaneous command every restorative and appliance that can possibly be required in the event of a sudden access of any such symptoms as those which have hitherto been so effectively encountered. It is hoped that a more invigorating air than that of the now sultry Lombard plain will accelerate the convalescence on which Dom Pedro has entered."

CHOLERA IN INDIA.

THE conditions under which cholera is prevailing in various parts of our Indian Empire have made many express a doubt as to the fitness of the municipalities for local self-government. Three hundred fatal attacks are reported from one municipality in Bombay, which has already been rebuked for its neglect of sanitary measures. The native part of Calcutta, as is well known, is also in that condition as regards filth which is everywhere admitted to be associated with the spread of cholera; and it is evident that a very strong expression of public feeling is needed in order to secure the abatement of such obvious sources of disease and death. Unfortunately, many such municipalities have inherited from the central Government the legacy of filth for which they are now blamed.

ETIOLOGY OF PURULENT BRONCHITIS.

PROFESSOR S. V. LEVASHOFF describes in the *Ejenedélnaya Klinicheskaya Gazeta* an interesting case of purulent bronchitis occurring in a medical man, which may help to throw some light on the etiology of this disease. The patient was a man of fifty-three, who had always enjoyed good general health, and had had no diseases of the respiratory organs, but had suffered occasionally from attacks of quinsy. In October last, after having been a long journey in Siberia, he began to suffer with rigors at night and sweats in the morning. Some days later cough came on, and he noticed a very foul smell in his mouth; he also began to expectorate a quantity of dirty grey mucus, which had the same foul odour, the sputum at times containing small lumps looking like bits of half-burnt rag. When he came under Prof. Levashoff's care he was evidently suffering from puru-

lent bronchitis, the chief seat of the affection being in the left lung. Prof. Levashoff took the utmost pains to find a means of accounting for the invasion of the disease, and at last came to the conclusion that something must have been introduced into the lungs from the outside which had caused the purulent secretion. On questioning the patient, he found that, when travelling in Siberia, in order to protect himself from the severity of the weather, he had covered himself with furs, felt mats, and other articles which are capable of conveying septic material, and it was doubtless in this way that the purulent bronchitis was brought on. The treatment adopted consisted chiefly of turpentine and carbolic acid inhalations, terpin, quinine, and narcotics internally, and energetic frictions with turpentine and lard over the chest. The disease presented a regular series of rises of temperature, with every third day copious discharges of purulent sputum, sometimes mixed with large quantities of blood. Notwithstanding all these very grave symptoms, complete recovery took place.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

THE petition, published on another page, on the part of the Association of Members to be reheard appears to be obviously reasonable; 4665 Members have approached the portals of the Privy Council office, have been admitted to the audience of the Lord President, have stated their case, and have gone away again. Neither the Lord President nor the authorities of their own College have returned any answer to their specified grievances. We are not deeply versed in the amenities of public official bodies; but such conduct seems to be not only incomprehensible but also discourteous. This second rap at the door of the Lord President may be answered, and the Members may restate their case in better and more cogent terms; we can testify to the genial capacity of the Lord President as a listener. The next general meeting of Fellows and Members at the College of Surgeons will be the occasion for the display of much earnestness and natural indignation. We plead, in anticipation, for fair play and conduct on the part of the Members, and for fair speech on the part of the Council. Yet, in the best interests of the College of Surgeons, such contests should cease. The Members' contention cannot, however, rest as matters now stand. We fear that a determined and lengthy struggle is yet in store. Members may well champion their own cause; but anyone, either on or off the Council, will, in our opinion, do good service to the College by suggesting and determining this collegiate question of professional enfranchisement.

THE DRINK QUESTION AND THE PROFESSION IN THE UNITED STATES.

THE *Medical Record* of New York regards the Bill for increasing the cost of licences to sell drink as the most important subject which has engaged the consideration of the Legislature this season. The ramifications of the misery and the disease caused by drunkenness are known only to medical men, who must wish to see some restriction of a trade so enormous and withal so disastrous. One point might be immediately provided for either in the Habitual Drunkards Bill or the County Government Bill—greater means of punishing publicans who knowingly supply habitual drunkards. It is pitiable to observe the extent to which this is done, even in respectable houses, and if the Legislature could signify its disapproval of what is nothing less than a crime, it would do a great act of mercy to the drunkards, and do something much needed to increase the respectability of the trade. It is impossible that the organs of the medical profession should be silent on this subject. Drunkenness is not entirely a matter of occasion and temptation, but it is largely so, and drunkards are a numerous and weak class who are entitled to consideration from the State, which, in the long run, has to keep many of them either in workhouses, prisons, or asylums.

OPEN-AIR TREATMENT FOR THE SICK.

THE effort that was made a short time since to secure, by means of a tent, the utmost practicable amount of open-air treatment for the Emperor of Germany affords an indication of the progress that is being made in order to secure such treatment for a large number of cases in German hospitals. The subject is dealt with at some length in an article entitled, "Notes on Modern Hospital Construction," which is contained in the current number of the *Practitioner*," where the writer, Mr. P. Gordon Smith, architect to the Local Government Board, describes, by means of illustrations and otherwise, the large balconies and verandahs in which patients in some of the German and other hospitals at times remain by day and by night for long periods during the months of May to September, both inclusive. The climate of North Germany has so many features like our own that the possibility of applying the same practice to hospital treatment in this country deserves consideration.

ARMY MEDICAL DEPARTMENT.

THE annual dinner of the Army Medical Department was held at the Holborn Restaurant on Tuesday, the 5th inst., Sir Thomas Crawford, K.C.B., the Director-General, in the chair, and a large number of distinguished officers of the service being present. The toasts given, in addition to the usual Royal ones, were "The Sister Services," acknowledged by Dr. Dick, C.B., Director-General, R.N., and Dr. Harvey of the Indian Medical Department; "The Guests," responded to by Sir Andrew Clark, Bart., President of the Royal College of Physicians; and "The Chairman," proposed by Sir W. Mac Cormac. A very pleasant evening was spent, the dinner being in every way a success.

TREATMENT OF INDOLENT ULCERS.

IN the case of large ulcers which refuse to heal, Dr. F. Spaeth, of the Hospital of the Holy Ghost in Frankfort, practises a number of somewhat deep incisions, which are made to gape widely, the hæmorrhage being arrested by cotton wool and pressure. An iodoform dressing is applied, and left in position for from one to two weeks. At the end of that time, when again dressed, the whole aspect of the ulcer is changed, healthy-looking granulations being seen growing up from beneath. Through the gaping incisions these granulations soon spread over the whole surface. They may in some cases be assisted by skin grafts.

INFECTIOUS HOSPITAL FOR CANTERBURY.

THE sanitary authority of this important Kentish city have for years had the question of hospital provision for first cases of infectious diseases before them; and at a recent meeting held there, the medical practitioners of Dover and Folkestone testified to the value of similar institutions in their own towns. It is to be hoped that Canterbury will no longer consent to be without this simple but effective means of sanitary defence.

FOREIGN UNIVERSITY INTELLIGENCE.

Cracow.—Dr. Kopernicki has been appointed Professor of Anthropology.

Geneva.—Dr. Eugène de la Harpe has been recognised as Privat Docent in Balneology and Climatology.

Graz.—Professor R. von Jaksch has been appointed senior physician to the Anna Children's Hospital.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following eminent foreign medical men are announced:—Dr. Moritz Smoler, formerly director of the Prague General Hospital.—Dr. Touchino, Professor of Pathology in Bahia.—Dr. Padieu, professor in the Amiens School of Medicine.

AN important correspondence has recently taken place between the local authorities of Richmond and Twickenham, the Thames Conservators, and the Board of Trade, with reference to the condition of the Thames between Teddington and Isleworth, as the result of which an arrangement has been accepted by the Conservators that the Board of Trade shall appoint an eminent engineer to hold an inquiry and report to the Board upon the whole question between the above parishes and the Conservators. The Richmond Select Vestry and the Twickenham Local Board assent to the proposal that persons interested in the subject matter of the reference may be at liberty to give their evidence before the engineer; but it is understood that the Conservators will not encourage opposition by such parties, and that the referee shall have full power to limit or reject such evidence as he may think irrelevant.

THE *Times* of Wednesday, through its Berlin correspondence, intimated that Mr. Mark Hovell had received intelligence of the death of his father, Mr. D. de Berdt Hovell, and was about to leave his responsible post in attendance on the Emperor of Germany for a time, on a visit to England. The correspondent added that the Empress very graciously expressed sympathy with Mr. Mark Hovell in the sad circumstances, and we are sure that a large number of the profession in England will feel, as we do, deep regret at the death of Mr. Hovell, and much sympathy with his family. His death arose from angina pectoris. We shall hope next week to give a few details of the life and character of one of the best specimens of the older type of English general practitioners.

FROM the report on the condition of the Metropolitan water supply during the month of April by the water examiner appointed under the Metropolis Water Act, 1871, it appears that the character of the Thames-derived water supplied to the metropolis, estimated alike by the proportion of organic matter present, the quantity of oxygen absorbable from permanganate, and the degree of colour tint, continued during April to correspond very closely with that which prevailed in March. In the case of the water derived from the Lea, the proportions of organic carbon and of oxygen absorbed, though almost identical with those met with in the water derived from the Thames, were found to be appreciably in excess of the proportions taken note of in the preceding month's report.

THE following appointments have been made recently:—At the Royal Free Hospital, Dr. Mackenzie, Medical Registrar to St. Thomas's Hospital, has been appointed Assistant Physician; Mr. Rose has been appointed Consulting Surgeon, and Mr. Boyce Barrow, Surgeon; whilst Mr. Berry and Mr. Battle have been elected Assistant Surgeons. At the West London Hospital, Mr. Stephen Paget has been appointed Assistant Surgeon. At the East London Hospital for Sick Children, Shadwell, Mr. Battle has been appointed Assistant Surgeon.

THE discussion on the papers on Electrolysis in the Treatment of Diseases of Women, which were read at the Obstetrical Society on Wednesday night, June 6th, was adjourned to a special meeting of the Society to be held at 8 P.M. on Thursday, June 21st.

THE daily papers of Thursday contain an appeal to the public by Mrs. Gladstone on behalf of the hospitals of London. The writer quotes statistics such as those we give in our present issue, and refutes certain objections which are sometimes urged by thoughtless people against the support of hospitals.

THE presentation by Sir Joseph Lister of the Johnson Testimonial Portrait will take place at King's College at 4.30 P.M. on Thursday, June 14th.

SURGEON-GENERAL WM. JAMES MOORE, C.I.E., hon surgeon to the Viceroy of India, has been appointed a Knight Commander of the Indian Empire.

MR. HARE, of Edinburgh, has, we learn, become a candidate for the vacant chair of Surgery in Owens College.

THE conversazione at the Royal College of Physicians has been fixed for Wednesday, June 27th, at 9 P.M.

REPORT OF THE LANCET

Special Sanitary Commission

ON THE

SWEATING SYSTEM IN LEEDS.

LEEDS, if not the greatest, is certainly one of the most important centres for the ready-made clothes trade in England—we might add, in the world. Long renowned for its woollen manufactures, clothiers naturally came to Leeds; for here they found the largest assortments of the materials they require in the making of clothes. Gradually by the side of the cloth mills arose great factories for making garments with the aid of machinery. But these factories do not suffice. Though employing several hundred workpeople and producing thousands of suits per week, the great wholesale clothiers cannot execute all the orders they receive. They consequently engage others to do a portion of their work, and these are generally Jew sweaters. During the last twenty years there has been a steady influx to Leeds of Polish-Russian Jews. The greater part come from the province of Kovno; and, on starting, are often acquainted with but one word of English, and that word is "Leeds." They generally land at Hull, proceed direct to Leeds, and know nothing of England or English institutions save what they have been able to learn in the latter town. Some of the older immigrants boast that they are Yorkshire men, but they rarely qualify themselves as Englishmen. It seems evident that, on the whole, they readily earned their living at Leeds, and to the Russian Jew, in dread of obligatory military service or suffering from religious persecution, the name of Leeds was but a modern term for an El Dorado. At first there were a great number of Jew employers, who worked more or less on the sweating system. These employers might have six or eight machines each, and the workpeople, by playing the small masters off one against the other, obtained better wages. But in the course of time these smaller workshops disappeared and made room for larger establishments, where there are twenty and more sewing-machines. Thus, in Leeds, sweating is generally done on a wholesale scale, and sweaters often employ as many as a hundred workpeople. From a sanitary point of view this is a decided advantage; for while the small sweater, with his six or ten workpeople, very generally escapes the notice of the factory inspector, this is no longer possible where from forty to a hundred are employed. Nevertheless, these large workshops, though occasionally visited by the factory inspector, are not so clean or so well drained as to occasion no anxiety with respect to the danger of infection.

The first large sweating establishment we visited, where

some eighty men and girls were at work, had good light, louvre windows facilitating ventilation, and did not seem overcrowded. On the other hand, the floor was abominably dirty, and one of the foremen, who had worked there eight months, acknowledged that he had never known the boards to have been cleaned. Though there was a room set apart for meals, a great number of girls were working in this room at the time of our visit. The closets were of the trough system, and immediately under the workshop windows. The trough had been neglected, and not emptied. The water was black and gave off offensive odours, and the closet seat was filthy. A urinal was placed against the workshop wall, and the bricks of the wall, being unprotected, were saturated. There were also several dry ashpits, which had not been emptied, and gave off bad odours. We were informed that the closets were so often neglected that a week ago the drains were blocked and had to be opened. Where trough closets exist in Leeds, a man in the employ of the corporation is supposed to come every day, unfasten a padlock affixed to a small door, and through this aperture he is able to empty the trough and replenish it with fresh water. When this is done regularly, the troughs do not, as a rule, occasion any nuisance. But in this case this duty had been neglected, and there had been delay in the removal of refuse from the ashpits; consequently some eighty girls and men were left to make clothes in an impure atmosphere, not to mention the many other neighbouring workshops belonging to different trades.

Close by, we ascended a dark dirty staircase, where a fetid odour prevailed, and reached a large barn-like garret in which some forty people were at work. The heat from the coke fire was intense; and this and the sulphur fumes, when mingling with the damp (caused by the water coming through the roof), did not improve the quality of the air we had to breathe. There were two good closets with flush working well, but the boards wanted scrubbing, and there was no separate room for meals. Tea was taken while at work, and dinner anywhere outside. Underneath there was another very large tailor's workshop; it was, however, closed on account of the Leeds Jew tailors' strike, which had not yet quite terminated. Our next visit brought us to an exceptionally clean workshop, where we found seventy persons engaged. The walls were freshly whitewashed, the boards well scrubbed, and good skylights and side windows admitted plenty of light and air. It would have been better had there been three instead of two closets. These, however, were very clean, and there was a plentiful use of disinfectants. The employer seemed fully aware of the necessity of cleanliness, and this may be taken as a proof that improvements in these matters are attainable even among the Jew sweaters. We now entered the workshop of a sweater who had been described to us as one of the worst employers of the town, and we were certainly received with but scant courtesy. He complained that because he was a Jew people were always coming up to look at his premises. They asked him how many people he had working, and then went away laughing at him. He had received "von big letter" from the House of Lords, asking him how many hands he employed, but he was not going to answer. In fact, he had burnt the letter. He knew the medical officer of health for Leeds, and would always be glad to see him; but he did not know the House of Lords, nor did he care for the House of Lords, and concluded by protesting that the "House of Lords vont give me anyting if I am 'ungry." When he had in this wise thoroughly exhausted himself we ascertained that he was then employing some forty-five people, including some very young girls and boys. There was through ventilation, but the windows and the floor were very dirty; and the two closets, situated on the stairs, had but one door between them; the seats were broken, and laths and plaster were falling in; the staircase was also filthy, and there was a general look of neglect about the whole place.

In the district where the present outbreak of small-pox commenced there are several very important sweaters' workshops. It was in December that the first cases of small-pox were reported, and these occurred in a very large common lodging-house. There were altogether nine cases in the lodging-house, and three other persons who had stayed in the house fell ill after removing to other parts of the town. Very energetic measures were taken to disinfect the place, to isolate the sick, and watch those who might have contracted the disease. Yet there have been since then more than a hundred cases of small-pox in Leeds, and at the moment of writing nineteen patients are under treatment at the small-pox hospital, and two new cases were taken in on the 28th and 29th of May. Though for so populous a town as Leeds (there are more than 300,000 inhabitants) the present epidemic of small-pox is as yet very restricted, the fact that a great proportion of the cases have occurred in very close proximity with the manufacture of innumerable articles of clothing is undoubtedly a grave circumstance. It so happens that immediately opposite the door of the common lodging-house, from whence nine small-pox patients were removed, separated from this door only by the width of a narrow street, is the entrance to an old abandoned mill, where there are now no less than five sweaters' workshops. Here, altogether, from 300 to 400 people, for the most part women, are engaged in tailoring. All these five workshops, which we carefully inspected, drain into a great shaft. It might have been the place formerly used for a hoist. There are no pans, no pipes, and no water. The closet seats are suspended over a vast deep opening made of bricks, and looking something like a huge well. Of course anything approaching to cleanliness is impossible, and this huge aperture, with its soiled sides, throws up its gases into the workshops. Some of the closets have small windows; others are in the centre of the building, and ventilate exclusively into the workshops. On one of the landings there is a little wooden ladder leading up to two closets. The second closet, in a dark inner recess, ventilates exclusively on the stairs; the floor is covered with urine, the stench overpowering. To have a huge brick shaft (instead of properly constructed trapped and ventilated drain pipes) running from the summit to the bottom of a lofty building is one of the most extraordinary cases of utter disregard for sanitary law we have ever seen. This huge well, some yards square, may be daily soiled by some 300 to 400 persons. The gases therein generated pass freely into the workshops and mingle with the atmosphere breathed by the workpeople as they handle many thousand different garments. And all this takes place immediately opposite the house where there have recently been nine cases of small-pox. Nor is this all. The self-same district has earned a melancholy notoriety for an outbreak of typhus fever. While this fearful disease is almost unknown in London, there were during the year 1886 in Leeds 59 cases of typhus fever, and these for the most part in the neighbourhood with which we are now dealing.

At the back of the lodging-house where the small-pox broke out we found another large tailoring establishment. The top floor was occupied by about forty workers. On the second floor there were some shoemakers, but they were not quite so numerous. These people had closets in the yard, with a large open midden, about 20 ft. by 4 ft., immediately under the windows of the lodging-house, so that the dust from this midden could blow into the house, or the germs from the windows of the lodging-house could fall on to the tailoresses who went to these closets. Fortunately, the lodging-house, being registered, was under strict sanitary supervision, and, as we have already stated, no pains were spared to ensure thorough disinfection. It is time, however, that these open middens were abolished. They are often very obnoxious.

A few minutes' walk from this point sufficed to bring us to what may be considered the Jews' quarter of the town. In one long narrow street we found a great many boot and shoe makers and tailors. Entering one of the houses where there are three different workshops, employing altogether about 160 persons, we were assailed by a most appalling stench. There were three closets, the seats and floors of which were besmeared with soil. The sanitary inspector had been here, and left word that the place was to be kept clean; but one of the sweaters protested that this was impossible, and certainly the warning given has had no effect. Retracing our steps somewhat, we entered a house where there were three smaller workshops, where altogether from sixty to eighty persons are employed. Here a sink had broken. The dirty water all flowed down the back stairs, rendering them so extremely slippery that it was almost impossible to descend without falling, and, in spite of every precaution, we slipped several times. Going into the back yard, which we reached by means of these stairs, we found a large building containing four more tailors' workshops, where some 150 persons are at work. For all these workshops there were closets in the yard, but in a deplorable condition. In some cases the seats had been broken away. Outside and on all sides the floor and ground were

covered with soil. Then we inquired why complaints were not made. The answer given was that no notice was taken "because, you see, we are Jews." It was most sickening to think that young and apparently modest women are compelled to frequent such places. There is plenty of room here for building more closets, so that each tenant may have a closet and a key for himself, and then be held responsible. As it is, the closets being open to all comers, it is difficult to affix the blame to anyone in particular. In the same yard, other closets on the trough system, owned by English tenants and carefully locked, are in a satisfactory condition, thus showing that it is only with regard to the foreign population that the nuisance has arisen. When the Jews rent a place they have no idea of demanding and insisting on obtaining proper sanitary accommodation. Thus, in these very premises, while the Christian tenants have what is necessary, the Jews must be satisfied with what others have refused and left. Evidently more pressure must be brought to bear by the sanitary authority upon the Jewish tenants and their landlords to make them both understand the importance of these questions. In the next workshop we visited some such lesson had evidently been given, and to some advantage. Here there were two closets with only one door, ventilating by the door into the middle of one of the workshops and through the chinks of the boards into another workshop. Nothing could be more awkward and unsuitable than the position of these closets; yet they gave rise to no perceptible nuisance, for they were admirably clean, well flushed, and plentifully supplied with disinfecting powder. Nevertheless, the tenants were also Jews, and not less than eighty persons frequented these two workshops. Our next visit was to a workshop where only ten persons were employed; then we entered another which seemed to be crowded by very young girls; and thence we went to a third where an effort was made to conceal the number of workers, and we found that there was no Factory Act notice paper on the wall, though many girls were employed on the premises.

We now visited two order shops, where some of the highest class work of the town is done, and where none but English trade unionists are employed. The first was in good condition, airy, and well lit. The second was a small, overheated, dirty garret, showing that in Leeds, as elsewhere, sanitary supervision is necessary among first-class tailors as among the sweaters.

It now remains to investigate the condition of the home workers, who are numerous in Leeds, and to study the effect produced by the gradual elimination of the small sweaters. On these points we have made important observations, showing that much suffering might be obviated by reforms that are practical even without additional legislation.

(To be continued.)

THE EIGHTH CENTENARY OF BOLOGNA UNIVERSITY.

(From our own Correspondent.)

"BOLOGNA THE FAT," "Bologna the Learned," is now earning a fuller title to her traditional epithets than at any former period of her history. Packed almost to bursting from the influx of visitors, Italian and foreign, she is giving hospitality to a larger representation of science and literature than has yet been done by any other academic city. Since the first week in May, she has been labouring under a congestion of exhibitions—of which the International Exposition of Music is only one out of half-a-dozen, all interesting, instructive, and successful; and now her great academic commemoration arrives to form the crown and culmination of her attractions. The magnificent *symposia* at which Edinburgh some four years ago entertained the scientific and learned world, on the occasion of the tercentenary of her University, are avowedly the inspiration of Bologna's present hospitality; and, if cordial good-will, seconded by elaborate preparation, and expressed with all the grace of Italian culture and refinement, can ensure success, the anniversary of the eight hundredth year of her birth as an academic centre bids fair to outrival her northern sister's tercentenary in splendour as she far outdates her in length of years.

Where to accommodate the mighty throng of professors and *savants* on their day of meeting on the 11th inst.? Behold the question which greatly exercised the organising committee until its solution three days ago. The grand basilica of San Petronio—Bologna's patron saint,—with its length of 120 yards and its breadth of 52 yards, was at first suggested as the place of rendezvous, but the ecclesiastical authorities were inflexible in their refusal to cede their building for such a purpose; so the next best area was chosen, the quadrangle of the Archiginnasio Antico, the old University, now used as a Communal Library (with 200,000 volumes). The order of proceedings, carefully rehearsed, will be the following:—

On the first day (the 11th) all the representatives of foreign and Italian seats of learning will be presented to the syndic (the Commendatore Gaetano Tacconi), after which they will be conducted to the various expositions now displaying their treasures to the public. In the evening the foreign representatives will meet in the University Library to arrange among themselves the speakers who will respond to the addresses of which they will be the object on the 12th.

On that day (the second in the programme) the representatives of the various learned bodies, Italian and foreign, will meet in the courtyard of the new University in the Via Zamboni (hour in the morning not yet fixed), while in an adjoining area will assemble the Bolognese societies and those of the other Emilian cities which are to take part in the festivities. A *cortège* will then be formed, to proceed in the following order: A band of music; the municipal banner man; the fire brigade, with its brilliant uniform; a succession of civic and other associations; another band of music; the mace-bearers of the University; the banner man, followed by the Rector; the Bolognese professors, in academic togs; after them the senates of the Italian universities in alphabetical order; another band of music; the representatives of foreign universities in alphabetical order, according to the names of their several nations; the representatives of the various academies and scientific institutes; a band of music; the students of Bologna University, with their banner; the representatives of the foreign and Italian nationalities, many in characteristic costumes and with their country's flag; while along the line of route will be marshalled the troops of the garrison; and the "service of honour" will be rendered by the military and civic societies. The *cortège* having arrived in the Piazza Galvani, the various groups will take up their position in an awning-covered space in the Piazza in front of the Archiginnasio, where will be performed the grand chorus composed by the Maestro Franchetti to words by Panzachi, and the symphony of Pirani will close the ceremony. The professors, the representatives of the learned societies, those of the Bolognese students, and those of the nationalities, Italian and foreign, will occupy places in the quadrangle and *loggie* of the Archiginnasio, beautifully draped and decorated; and fronting the entrance will be erected the thrones for the King and Queen of Italy and the Royal Family. In the *loggie* of the upper floors of the Archiginnasio the invited guests will find their places, which, it is feared, will be rather restricted. On the arrival of the Royal personages the Panzacchi-Franchetti choir will give the ode; the Rector will make a brief address; and then the Minister of Public Instruction will follow with words of welcome to the representatives. The great discourse of the day will be delivered by the distinguished poet-professor, Giosuè Carducci, which is expected to last an hour, after which the foreign representatives will speak in the name of their several nationalities. Finally, that accomplished Latinist, Professor Gandino, will thank the assemblage in the language in which he is a master. In the afternoon a banquet will be given by the Government in the Town Hall to the representatives, foreign and Italian, Signor Boselli, Minister of Public Instruction, presiding. In the evening there will be a grand reception in the Communal Palace to the representatives on the part of the Municipality. The students of all nationalities who may assist at the commemoration will be present at this *serata*.

On the third day (the 13th), in the quadrangle of the Archiginnasio, the honorary degrees will be conferred on the professors, absent as well as present, of the foreign universities. The Minister of Public Instruction will deliver an address, and Professor Ceneri will speak in behalf of the juridical faculty.

A brief indication of the foreign universities represented will give your readers an idea of the magnitude of the

celebration. Austria-Hungary sends six professors from Buda-Peath, two from Cracow, one from Cernowitz, two from Gratz, one from Innsbruck, five from Kolozsvar, two from Leopoli, and one from Prague; Belgium sends two from Brussels, six from Ghent, three from Liège, and two from Louvaine; Denmark, two from Copenhagen; France, six from Paris, two from Aix, three from Bordeaux, one from Caen, one from Lille, and six from Lyons; Germany has a very large representation, including two from Berlin, one each from Bonn, Breslau, Erlangen, Freyburg, Göttingen, Halle, Heidelberg, Königsberg, Kiel, Munich, and Würzburg; while Greifswald, Jena, Leipsic, Marburg, Rostock, Strasburg, and Tübingen send two a-piece; Greece has two representatives from Athens; England has a not yet determined number from Aberdeen, Cambridge, Dublin, Durham, Edinburgh, Glasgow, London, Manchester, Oxford, and St. Andrews; Holland sends representatives from Amsterdam, Leyden, Utrecht, and Gröningen; Portugal, from Coimbra; Roumania, from Jassy; Russia, from Dorpat and St. Petersburg; Spain, from Oviedo and Madrid; while Sweden and Norway and Switzerland complete the European contingent with professors from Christiania, Lind, and Upsal, and from Basle, Berne, Geneva, and Zürich. North America sends representatives from Baltimore and Cambridge, and from universities in or at Iowa, Ithaca, Newhaven, Michigan, Virginia, and Wisconsin; and South America is represented by a delegate from Chili. British India sends a professor from Bombay; Australia one from Sydney; and New Zealand three from the University of Wellington. In all, eighty-one universities are represented by 160 professors, of whom eight are principals or vice-principals, fifteen are Latinists, thirty-five jurists, thirteen physicians or surgeons, five rhetoricians, three geologists, two theologians, seven philosophers, one physicist, five philologers, three historians, two political economists, one geographer, five naturalists, three fine arts, two pharmacologists, two foreign languages, one musician, one archæologist, two astronomers, three church historians, three gynæcologists, and the others represent different sciences. As I write more acceptances of invitations are coming in, till Bologna may add to her other exhibitions one of the *omne scibile!*

Bologna, June 2nd.

ARMY VETERINARY DEPARTMENT.

ANNUAL REPORT AND STATISTICAL RETURNS FOR THE YEAR ENDING DEC. 31st, 1887.

THE annual report of the Principal Veterinary Surgeon of the Army shows the average strength of troop horses in the United Kingdom in 1887 to have been 12,970. The cases admitted to treatment during the year were in the ratio of 648 per 1000; the deaths amounted to 13·49, and the number destroyed to 7·02 per 1000, making a total loss of 20·51. The proportion cast and sold, exclusive of the Household Cavalry, was 95·16 per 1000, the cause of rather more than one-third being returned under the head of old age. These ratios are all somewhat higher than in the two preceding years. The proportion constantly non-effective from disease or injuries amounted to 33·92 per 1000, which is considerably lower than in either of the preceding years, when it was 37·99 and 38·0 per 1000. Omitting the Military Police on account of the smallness of their numbers (only sixty), the Household Cavalry had the lowest, and the Commissariat and Transport Corps the highest, proportion of cases; and the heavy cavalry the lowest, and the medium cavalry the highest, death-rates. Diseases and injuries of the locomotory apparatus, with surgical diseases and accidents, furnished upwards of three-fifths of all the cases, the former being in the proportion of 203 and the latter of 201 per 1000 of the strength. Diseases of the respiratory apparatus were next in frequency, causing 89·8 admissions per 1000; but they furnished the highest death-rate, amounting to 5·78 per 1000. The ratio of deaths included under the locomotory apparatus was 5·24, under diseases of the digestive system 3·85, and under surgical diseases and accidents 1·46 per 1000. Pneumonia, pleuro-pneumonia, and pleuritis were the most fatal lung diseases, the deaths having been 49 in 156 cases, or very nearly 1 in 3. Of specific diseases there were 370 cases of strangles, with 5 deaths among remounts and young horses; though not a fatal disease, it is apt to result in "roaring." Epizootic fever or influenza was the cause of 175 admissions, but only 3 deaths. It seems to have been confined to a few stations: Regent's-park Barracks furnished the largest number of cases, the other barracks being Newbridge, Norwich, Edinburgh, and Hilsea. The horses were free from glanders during the year; one was destroyed as a suspected case at Norwich, but it was subsequently decided that the disease was not glanders. Dr. Fleming remarks: "So far as I am aware, this is the first year in the history of the British Army in which glanders has not been reported. ..... Not many years ago it was a common and most destructive disease at many stations, if not every one, in the three kingdoms, and in the first quarter of the present century it caused the destruction of whole troops of horses in cavalry and artillery. Now our barracks are completely free from it. ..... So far as I can learn, the British Army is the only one in Europe, if not in the world, in which glanders is not present to a more or less considerable extent."

Regent's-park Barracks are stated to be the most unhealthy, as shown by the amount of contagious and epizootic diseases in them, Norwich, Hilsea, and Newbridge coming next. In the last the sickness was due to bad drainage and cesspools near the stables, a condition which has now been remedied.

As in former returns, the greatest sickness is shown to have occurred among the five-year-old horses, and next to it among the four-year-old, and the highest death-rate among the latter. Of the horses cast, 402, or 331 per 1000 of strength, were returned as for "old age," and 167, or 137 per 1000, as "physically unfit." There were 61 cast for "roaring," which, as already stated, is often a result of strangles. "Attempts are now being made to abolish this cause of inefficiency by an operation on the larynx which I have introduced, and which I have reason to hope will be successful."

In Egypt the average strength of animals during the year was 641 horses, 421 mules, and 59 camels. The admissions and deaths of each class per 1000 of strength were as follows:—

	Admitted.	Died.	Destroyed.	Total mortality.
Horses	582	18·7	24·9	43·6
Mules	370	11·9	21·3	33·2
Camels	525	203·4	—	203·4

As at home, the greatest mortality among the horses was from diseases and accidents of the locomotory apparatus, and next to these from diseases of the digestive apparatus, chiefly enteritis. In the class of contagious and epizootic diseases only two cases occurred, one of glanders and one of farcy, both of the horses affected being immediately destroyed. Among the mules the principal causes of admissions and deaths were also from affections of the locomotory apparatus. One case of glanders occurred among them. Of the camels nearly one-half of the admissions were for anæmia, and nearly one-third for sore backs from the saddle; there were 5 admissions for mange. Of the 12 deaths, 11 were from anæmia and 1 from pneumonia.

In South Africa the average strength of horses and mules was 633, from which the admissions were in the proportion of 945, and deaths and destroyed 229·1 per 1000. These very high rates of sickness and mortality were due to the disease known as "horse sickness," of which 174 cases were admitted and 122 died, being respectively in the ratio of 274·9 and 192·7 per 1000 of the strength. The disease prevailed in the months of March, April, and May. Mr. Nunn, who was sent out last year to investigate the nature of the disease and to try whether it could not be prevented by Pasteur's method of inoculation, has reported that it is not anthrax, as was supposed, and "that it is not transmissible from diseased to healthy animals by any of the channels or methods of communication known in that disease." Mr. Nunn considers it to be malarious in its nature. "In some of its features the disease greatly resembles human cholera morbus, and especially in its occult characters, the suddenness of its attack, the heavy mortality it occasions, and its prevalence in certain localities and at a particular season." It does not appear to be amenable to any treatment which has yet been tried. Mr. Nunn is continuing his investigations into the nature of this formidable disease.

Dr. Fleming gives a very satisfactory account of the work done at the Army Veterinary School at Aldershot. The courses of instruction were attended by 71 officers and 121

men. Of the former, 54 were awarded certificates, and of the latter 118 were found qualified on examination as farriers; 38 of the men, including the 3 unsuccessful, were from infantry regiments. A number of important experiments have been carried on in the school laboratory, especially with reference to the action of medicines administered hypodermically. "The results of this inquiry will be published this year; they are of great practical value, and will materially influence the amount of medicine to be carried in the field, for a small pocket-case of these powerful drugs will be almost equivalent to what are now carried in an ordinary medicine chest." Our readers may remember that Deputy Surgeon-General Marston called attention to the importance of the introduction of these concentrated medicines into the army medical service.[1] An Army Veterinary Association was formed at Aldershot, at the periodical meetings of which a number of papers on important subjects connected with the Service were read and discussed. A museum also is in course of formation in connexion with the school, which cannot fail to prove useful to the profession.

Dr. Fleming reports favourably of the progress made in the instruction of men in the ranks—not farriers—in the practice of shoeing. The number so trained, now in the ranks, amounts to 487, of whom 167 are infantry soldiers. From unavoidable circumstances, the system of winter or frost shoeing introduced by Dr. Fleming did not receive the trial which was proposed to be made; but a thorough trial will be arranged for next winter. So far as it has yet been adopted, the results are reported to be very satisfactory. We have much pleasure in again congratulating Dr. Fleming upon the results of his labours as shown in the healthy condition of the horses, the important progress made in the educational work under his superintendence, and the clear and instructive report and returns which he has prepared respecting the work done by the department.

THE RABBIT PEST IN AUSTRALIA.

THE measures proposed for the extermination of the plague of rabbits with which New South Wales is afflicted have been submitted to the Board of Health of the colony, who have reported adversely against their adoption. These measures comprise the suggestion of Prof. Pasteur to disseminate the highly infective and fatal disease known as "fowl cholera" amongst the rabbits by sprinkling their food with pure cultivations of the microbe of fowl cholera in meat infusions; that of Prof. Watson, who proposes to introduce rabbit itch; and that of Messrs. Butcher and Ellis, who also recommend the introduction of a contagious disease peculiar to rabbits, which they have found to be highly fatal, but the precise nature of which is apparently undetermined. All the papers bearing on these proposals, together with the report of the Board of Health, have been recently issued by order of the Legislative Assembly. M. Pasteur's proposition is well known. Besides his original letter to *Le Temps*, of Nov. 29th, 1887, he applies formally for the award (£25,000) offered by the Government of New South Wales for a certain means to eradicate the pest, and informs the authorities that delegates were leaving for the colony on Feb. 8th. He also reports several experiments, to show that no farm stock are liable to be infected by the disease—which, so far, seems to be capable only of propagation to rabbits and poultry. He further relates the success attending the application of his method on the estate of Mdme. Pommery at Reims, where rabbits had increased to an alarming degree. Professor Watson, in his communication of Oct. 5th, 1885, advocated the introduction into the colony of a few German rabbits infested with Sarcoptes cuniculi, so as to disseminate scabies amongst the animals, who mostly succumb to septic poisoning resulting from the suppuration induced by the cutaneous lesions. There are several reports on this scheme. Dr. Paterson expresses doubt as to the incommunicability of this species of itch to sheep; but both Mr. H. C. Taylor and Mr. E. Stanley, the Government veterinarian, report experiments which go to prove that the disease is not communicable to sheep or other farm stock, or to man. Mr. Stanley however, in a subsequent report, is still doubtful about the immunity of sheep, and does not think the disease sufficiently efficacious for killing rabbits or for preventing their propagation. Drs. Ellis and Butcher, thinking that the best plan would be to discover to what diseases rabbits are liable, found one highly contagious affection, which they term "scab," but which is apparently different from that described by Professor Watson. They had experimented with this disease, and found it to be readily communicated to rabbits and very fatal. There is also a letter from Dr. Wilkinson, urging the Government to found a bacteriological laboratory where these subjects may be considered. The Board of Health, in their report, point out that it does not follow that those diseases which are so fatal in limited areas and with rabbits crowded in confinement would be equally infectious amongst the animals living in a free state. The report states that there is no evidence as to the pathological nature of the disease described by Drs. Butcher and Ellis, or that it might not be communicated to other animals or man. The latter objection holds also regarding Professor Watson's proposal. As regards M. Pasteur's scheme, it is pointed out that he does not refer to the possibility of the disease being communicated to human beings; and the Board would require more evidence on this point in view of recent investigations—e.g., with respect to scarlet fever. They go on to say: "In introducing an epidemic or infectious disease of any kind into this country the Government would be adopting a measure the results of which cannot be at present foreseen; and if in the course of events it were to be found that these results were in any way prejudicial to the health, either of human beings or of stock, it would be almost certainly beyond the power of any authority to remedy the mischief which had been done." The Board therefore recommended that the measures proposed for the introduction of infection among rabbits should not be adopted by the Government; nor did they alter this decision after the perusal of M. Pasteur's report of his experiments and trials which was received subsequently.

The decision thus arrived at must, we think, be held to be based on sound reasoning. For although it is possible that by either one or other of the measures proposed the desired reduction in the number of rabbits infesting and devastating the colony might be effected, yet it behoves the Government of New South Wales to be extremely cautious before committing themselves to a gigantic experiment which might be fraught with evil consequences to other than the animals that have to be exterminated. We cannot but sympathise with the people and the Government in presence of a plague which is not to be arrested by ordinary means, and which in time would convert a fertile land into a barren waste. Seldom has a more difficult problem been placed before any Government, and the large reward that has been offered is a measure of the gravity with which the fact is viewed. Of the three proposals, that of M. Pasteur alone has the advantage of being based upon strictly scientific principles; but in the present state of knowledge regarding bacterial diseases, it would be rash to adopt his proposals on the great scale that is contemplated. The soil and water would teem with the microbe of fowl cholera; and who knows but that a plague far worse and perhaps directly involving human life might not arise in consequence.

[1] THE LANCET, March 17th, 1888.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

A MEETING of the Fellows was held on the 2nd inst. to receive the Annual Report of the Council, and to transact such other business as might be brought before them. The minutes of the last meeting having been duly signed, Mr. Hamilton was about to propose a resolution, but it was ruled by the President that the report of the Council should first be received. It having been proposed and seconded that the report should be adopted,

Mr. CARTE referred to the work done by the Council during the past year, and alluded in the course of his remarks to the exclusion of Irish graduates from hospital appointments in England, and to the correspondence which the College had had with the Secretary of State for War in reference to the rank of army medical officers. He next drew attention to the Carmichael Prize Fund, and pointed

out the excessive cost of printing the two successful essays, which amounted, including the prize money, to £100 above the sum at the disposal of the trustees. He was happy to state that the funds of the College were in a satisfactory condition.

Mr. THOMSON asked what steps were about to be taken in reference to the appointment of a professor of pathology.

The PRESIDENT, in reply, stated that the subject had been referred to the Education Committee of the Council, who recommended the appointment being made, but that a bye-law had to be altered, and that it would shortly be discussed by the Council.

Mr. THOMSON said that the College funds ought not to be mulcted to the amount of £100, the deficiency in the sum at the control of the trustees of the Carmichael Fund, and he was of opinion that the money might be directed into some more suitable channel.

The PRESIDENT explained that one of the trustees of the Carmichael Fund objected to any alteration being made in its distribution, but the deficiency could be made up in future years from the Fund, so that the College ultimately would not lose anything. He characterised the printing of these costly essays as a useless piece of expenditure.

Mr. JACOB also spoke of the uselessness of the Carmichael Prize Fund, and showed that printing the two successful essays cost no less than a sum of £430.

The report having been adopted, Mr. THOMSON proposed his resolution in reference to a biennial presidency. He thought the Council had been remiss in not attending to the resolution passed last year by the Fellows. He considered that the Fellows should have been requested by letter to give their opinion on the subject. He next alluded to the tenure of office of the presidents of the College of Surgeons in London and of the College of Physicians in Ireland. The post of president should be reserved for the senior members, men who were distinguished by their work in the profession, and the dignity should be made a more permanent one.

Mr. MARTIN (Portlaw) seconded the resolution, and Mr. T. STOKER supported it.

Mr. KIDD spoke in favour of having the subject remitted to Council to consider how the matter might best be carried out, so as to allow the presidential chair to be occupied for more than one year. The Council, as the executive body of the College, might devise some scheme for the purpose.

Mr. MACNAMARA said the matter had been a good deal discussed; there was, however, a difficulty. The duties of the chair, if carefully discharged, took up an enormous amount of time; and he did not think a president would care to continue for a second year.

Mr. THOMSON modified his resolution as follows: "It being desirable that presidents should remain longer in office than for one year, it be remitted to the Council to report how that could be done, and to report the matter to the College." This was formally seconded by Mr. CARTE and passed, one Fellow dissenting.

Mr. HAMILTON rose to move the following resolution: "That the resolution of May 18th be rescinded, and the incoming Council be asked to take the sense of the Fellows on the amalgamation of the medical schools."

Mr. THOMSON rose to a point of order. Mr. Hamilton's resolution was contrary to the rules of the College, as a resolution of the kind required to be sent out with notice to the Fellows.

Mr. HAMILTON said the ordinance in the Charter was simply permissive, and that it did not in any way prevent the Fellows from taking a retrospective view of the course the College had taken.

The PRESIDENT appealed to Mr. Hamilton not to press the motion, as he did not wish to give any decision in the matter.

Mr. HAMILTON acquiesced, but considered the matter a very important one, he being of opinion that the previous meeting was illegal, as some of the Fellows only had two days' notice, instead of six, as required for a special meeting.

The PRESIDENT believed the meeting was properly constituted, and he thought it a dangerous thing to allow a resolution to be brought forward to rescind a resolution without notice being previously given.

Mr. HAMILTON said his object had been gained, which was to draw the attention of the Fellows, especially the provincial Fellows, to the hasty way in which the previous meeting had been convened.

The resolution having been withdrawn, the proceedings terminated.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On Epidemic Diphtheria at Enfield, by Dr. BRUCE LOW.[1] This report is a somewhat lengthy one, and it deals with a number of considerations touching the etiology of diphtheria and the general sanitary administration of Enfield which it was necessary to investigate. Much time was evidently bestowed in inquiry into some of the points relating to the distribution of diphtheria; but these were in some respects found to be inconclusive in so far as this epidemic is concerned, owing to the lapse of time between the commencement of the outbreak and the intervention of the Government; but it is stated that much that was ascertained will remain available for future use in similar investigations by the medical department of the Local Government Board. In reviewing the circumstances of the epidemic we shall pass by some of these considerations, all of which can, however, be studied in the report itself, which is placed on sale. During the five months, September, 1887, to January, 1888, as many as 213 cases of diphtheria and 48 deaths came under notice in the Enfield district, the disease having during previous years been somewhat persistent, a circumstance that materially hindered investigation as to its initial cause. It was during December that the disease mainly aroused attention. It is true that before this it was very prevalent, no less than fifty-two attacks being heard of in October. But at this earlier date the disease mainly attacked the poorer classes, falling especially upon frequenters of one infant school; and even in November it was almost exclusively the artisan class that was attacked. But in December the circumstances were materially altered, and for the first time those attacked belonged almost wholly to the better classes. Then arose a panic, resulting in the end in Dr. Low's inquiry. Amongst the many things that called for especial investigation was the influence of sewer air upon the outbreak, an influence with which the epidemic was very generally identified in the locality. This is dealt with at length, and by means of a process of exclusion it is ultimately set aside as not being a primary cause either of the commencement of the disease or of its diffusion. And, in discussing the latter point, it is evident that it soon became necessary to divide the epidemic into two parts. The earlier wide manifestation in October is clearly shown to have been largely due to the influence of school attendance, and the number of ill-recognised cases of "colds," "sore throats," &c., which go largely to increase the total number of attacks beyond those recorded, materially aided in this part of the diffusion. But the second outburst, from the end of November to the 21st of December, had another cause. Spread as it was over the well-to-do and residential part of Enfield, it became evident that every one of the fatal cases in one area—namely, Central Enfield—whose attack commenced at the end of November or during the first three weeks of December, had partaken of milk from one and the same source. Two distinct areas were, however, found to be invaded at this time, and the disease in its incidence upon them showed a complete indifference to locality, whilst it seized especially on those persons, however wide apart their residences, who were consumers of the particular milk. Taking the houses invaded in these two districts, it was found that amongst those taking this milk 14·0 to 8·5 per cent. respectively were attacked; whereas, notwithstanding the long-continued prevalence of the infection in Enfield generally, only 0·5 and 1·0 per cent. of houses not receiving the supply were attacked. And whereas no deaths took place amongst the latter class of houses in either area, 27·2 per cent. and 29·0 per cent. occurred amongst those consuming the particular milk. Many other points of considerable interest are referred to in the report, and some very striking examples are given of the pernicious practice of taking children to see and to kiss their dying and dead playmates and relatives, with the result of further diffusing the infection. The consideration of the

[1] Eyre & Spottiswoode, East Harding-street, E.C.; A. & C. Black, Edinburgh; Hodges, Figgis, & Co., Dublin.

relation between diseases in animals and diphtheria in the human subject also receives attention; and circumstances are related to indicate that, apart from the question of priority of infection, there seem some grounds for believing that in children and in cats a fatal disease did exist which seemed infectious from one to another, and which, whilst it may be set down as a sort of "influenza" in the cat, was unmistakable diphtheria in the human subject. Whilst, however, the report by no means professes to deal exhaustively with these subjects, it is evident that much pains were bestowed by the writer in collecting all information which could be useful, whether for the purposes of the inquiry immediately under consideration, or for further opportunities of research that may occur; and, judging from this first contribution to the sanitary literature of the department which Dr. Bruce Low has so recently joined, there are grounds for assuming that the etiology of preventable disease is a subject which his labours will materially tend to elucidate.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5794 births and 3172 deaths were registered during the week ending June 2nd. The annual rate of mortality in these towns, which had been 18·9 and 17·8 per 1000 in the preceding two weeks, further declined last week to 17·6. During the first nine weeks of the current quarter the death-rate in these towns averaged 19·0 per 1000, and was 2·7 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 13·0 in Derby, 14·3 in Bradford, 14·3 in Brighton, and 14·6 in Birkenhead. The rates in the other towns ranged upwards to 22·4 in Blackburn, 23·7 in Preston, 24·9 in Wolverhampton, and 25·7 in Manchester. The deaths referred to the principal zymotic diseases, which had been 330 and 285 in the preceding two weeks, further declined last week to 282; they included 101 from whooping-cough, 46 from diarrhœa, 39 from diphtheria, 34 from measles, 31 from scarlet fever, 21 from "fever" (principally enteric), and 10 from small-pox. No death from any of these zymotic diseases was registered during the week in Birkenhead or in Huddersfield, whereas they caused the greatest mortality in Preston and Manchester. The greatest mortality from whooping-cough occurred in Sheffield, Salford, Wolverhampton, and Manchester; from measles in Bradford; from scarlet fever in Blackburn; and from "fever" in Nottingham. The 39 deaths from diphtheria included 26 in London, 3 in Hull, and 2 in Norwich. Small-pox caused 4 deaths in Sheffield, 1 in Bristol, 1 in Nottingham, 1 in Derby, 1 in Oldham, 1 in Preston, and 1 in Hull, but not one in any of the twenty other large provincial towns, or in London. The Metropolitan Asylum Hospitals and the Highgate Small-pox Hospital contained only 3 small-pox patients at the end of last week, against numbers declining from 23 to 4 on the preceding five Saturdays. The number of scarlet-fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 947 at the end of last week, against numbers declining from 1047 to 958 on the preceding four Saturdays; the 96 cases admitted to these hospitals during the week showed an increase of 24 upon the number in the previous week. The deaths referred to diseases of the respiratory organs in London, which had been 296 and 228 in the preceding two weeks, were last week 237, and were 26 below the corrected average. The causes of 84, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Oldham, Sunderland, and in three other smaller towns; the largest proportions of uncertified deaths were registered in Sheffield, Salford, Hull, and Blackburn.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·3 and 20·9 per 1000 in the preceding two weeks, declined again to 19·3 in the week ending June 2nd; this rate exceeded, however, by 1·7 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged from 12·2 and 14·0 in Greenock and Leith, to 22·2 in Glasgow and 22·8 in Paisley. The 489 deaths in the eight towns showed a decline of 40 from the number returned in the previous week; they included 14 which were referred to whooping-cough, 11 to measles, 9 to scarlet fever, 7 to "fever," 7 to diarrhœa, 4 to diphtheria, and not one to small-pox. Thus, 52 deaths resulted from these principal zymotic diseases, against 41 and 51 in the preceding two weeks. These were equal to an annual rate of 2·1 per 1000, which was 0·5 above the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 19, 14, and 11 in the preceding three weeks, rose again last week to 14, of which 12 occurred in Glasgow. The deaths from measles, on the other hand, which had been 13 in each of the previous two weeks, declined last week to 11, and included 10 in Glasgow. The 7 deaths referred to "fever" showed a further slight increase upon the low numbers in recent weeks, 4 being returned in Glasgow. The 9 fatal cases of scarlet fever were within one of the number in the previous week, and included 6 in Glasgow, 2 in Dundee, and 1 in Edinburgh. The deaths attributed to diarrhœa, which had been 10 in each of the preceding two weeks, declined to 7; and of the 4 fatal cases of diphtheria, 2 occurred in Glasgow and 2 in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 76 and 103 in the previous two weeks, declined again last week to 80, and were 22 below the number in the corresponding week of last year. The causes of 62, or more than 12 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had increased in the preceding four weeks from 21·7 to 24·4 per 1000, declined to 23·5 in the week ending June 2nd. During the first nine weeks of the current quarter the death-rate in the city averaged 25·3 per 1000, the mean rate during the same period being 17·9 in London and 20·1 in Edinburgh. The 159 deaths in Dublin showed a decline of 6 from the number in the previous week; they included 9 which were referred to whooping-cough, 4 to scarlet fever, 4 to "fever" (typhus, enteric, or ill-defined), 2 to diarrhœa, and not one either to small-pox or diphtheria; in all, 20 deaths resulted from these principal zymotic diseases, against 19 and 17 in the preceding two weeks. The annual death-rate from these zymotic diseases was equal to 3·0 per 1000, the rate from the same diseases being 1·6 in London and 1·0 in Edinburgh. The fatal cases of whooping-cough showed an increase of 2 upon the number returned in each of the preceding two weeks, and the deaths from "fever" were also more numerous; the deaths from measles and scarlet fever, on the other hand, showed a decline. The deaths both of infants and of elderly persons exceeded the number returned in the previous week. Four inquest cases and 3 deaths from violence were registered; and 38, or nearly a quarter, of the deaths occurred in public institutions. The causes of 22, or nearly 14 per cent., of the deaths in the city were not certified.

THE SERVICES.

Deputy Surgeon-General J. A. Marston, C.B., has been appointed Principal Medical Officer at Woolwich, in succession to Deputy Surgeon-General J. S. Tulloch, who has retired.

Brigade Surgeon H. F. Paterson, M.D., has succeeded Deputy Surgeon-General R. Hungerford as Principal Medical Officer of the Eastern District.

ARMY MEDICAL RESERVE OF OFFICERS.—Surgeon Commandant Arthur Trehern Norton, the London Division Volunteer Medical Staff Corps, to be Surgeon-Major, ranking as Lieutenant-Colonel (dated June 6th, 1888).—The undermentioned Officers to be Surgeons-Major, ranking as Majors (dated June 6th, 1888): Surgeon and Honorary Surgeon-Major Thomas Partridge, 2nd Volunteer Battalion, the Gloucestershire Regiment, and Surgeon Robert Phair Frazer, 1st Volunteer Battalion, the Royal Fusiliers (City of London Regiment).—The undermentioned Officers to be Surgeons, ranking as Captains (dated June 6th, 18·8): Surgeon John Edward Squire, M.D., the London Division, Volunteer Medical Staff Corps; Acting Surgeon Henry Wm. Roberts, 2nd Volunteer Battalion, the Royal West Kent Regiment; Acting Surgeon David Valentine Rees, 1st Volunteer Battalion, the South Wales Borderers; and Surgeon John Home Hay, M.D., 7th Volunteer Battalion, Princess Louise's (Argyll and Sutherland Highlanders).

ADMIRALTY.—The following appointments have been made:—Fleet Surgeon Thomas C. Hickey, to the *Benbow*, and Staff Surgeon Christopher Harvey, to the *Neptune* (both dated June 14th, 1888); Staff Surgeon Thomas M. Sibbald, to the *President*, additional, temporarily (dated June 4th, 1888); Surgeon Graham E. Kennedy, to the *Benbow;* Surgeon George T. Broatch, to the *Orwell;* Surgeon Robert F. Bowie, to the *Excellent* (dated June 14th, 1888); Mr. John Souter, to be Surgeon and Agent at Buryhead; and Mr. Jas. Little, to be Surgeon and Agent at Maryport (both dated June 5th, 1888).

ENGINEER VOLUNTEERS (Submarine Miners).—The Clyde Division: Jas. Whiteford, M.D., to be Acting Surgeon (dated June 2nd, 1888), and Thomas Kennedy Dalziel, M.B., to be Acting Surgeon (dated June 2nd, 1888).

RIFLE VOLUNTEERS.—5th (Irish) Volunteer Battalion, the King's (Liverpool Regiment): Thomas Gerald Garry, M.D., to be Acting Surgeon (dated June 2nd, 1888).—3rd Volunteer Battalion, the Norfolk Regiment: Augustus William Thomas, Gent., to be Acting Surgeon (dated June 2nd, 1888).—1st Volunteer Battalion, the Northumberland Fusiliers: John Archibald Jackson, M.B., to be Acting Surgeon (dated June 2nd, 1888).—2nd Volunteer Battalion, the Duke of Wellington's (West Riding Regiment): John Martin, Gent., to be Acting Surgeon (dated June 2nd, 1888).

Correspondence.

"Audi alteram partem."

NOTIFICATION OF INFECTIOUS DISEASE.

To the Editors of THE LANCET.

SIRS,—In the discussion which is now taking place on this important question of public policy certain medical aspects of it have not as yet received the attention that might be expected in the columns of THE LANCET. Different classes of people regard it from different points of view according to their interests. Dairymen and shopkeepers regard it from one standpoint, and their customers generally from that which is exactly opposite. Private medical practitioners are, as a rule, impressed with the importance of protecting the interests of their patients; on the other hand it is the duty of medical officers of health to look first to the safety of the public, which is often endangered by the concealment of cases of small-pox and fever.

No one has a better right than my friend Dr. Carpenter to address the profession on this subject; but it seems to me that he approaches it from the private practitioner's point of view. Will you allow me to offer a few remarks which may be taken as supplementary of those contained in his important letter of May 23rd. As I understand Dr. Carpenter, he argues in favour of leaving it entirely to the practitioner to certify, or not to certify, as to the existence of a case of small-pox or fever, according to his discretion. The public authority to whom his certificates are sent would, I presume, be expected to furnish him with the stamped forms, and I suppose it would be expected to pay him for such forms as he chose to send. This arrangement makes the practitioner master of the situation, and, from his point of view, leaves nothing to be desired. But if I were discussing this proposal, as a member of a public body which had to provide the hospital accommodation and other sanitary organisation for a district, I should feel it my duty to point out that the opinions of medical practitioners as to the sufficiency of "measures to prevent infection extending to other people" differed very widely; that, while the opinions of most practitioners would probably coincide with those of the majority of medical officers, other qualified medical men would entertain views with which public officials could by no means agree. As extreme instances of divergence, at the lowest end of the scale, I should mention cases within my own knowledge all the circumstances of which were fully proved at the time. I should speak of a barber who, with the sanction of his medical adviser, pursued his business in a room separated only by a curtain from another, in which there lay a person ill with confluent small-pox; of a poor woman who, with the sanction of a medical practitioner, took her child from Batley in Yorkshire to Nottingham in 1882, travelling all the way with many unconscious fellow-passengers, and carrying in her pocket as a precautionary measure a piece of camphor; of a dairyman, at whose little farmhouse in the country I lately found that there had been eight cases of diphtheria (two fatal) within thirty-three days, the dairy operations proceeding all the while, and part of the produce being sent to a house in Chelsea until I stopped it. It seems to me that these cases show not only the extent to which public interests are sacrificed by individuals, but also how impossible it would be to prevent such a sacrifice if it were left entirely to private practitioners to decide what measures are necessary to prevent disease extending to others, and which cases they will certify to a public authority.

Dr. Carpenter tells us in his letter that he has been "speaking to a great many sanitary inspectors on this matter." Surely their superiors, his professional colleagues in preventive medicine, are the proper people to speak with on this matter. Is he not setting a dangerous example in this respect? Did he, by any chance, read a paragraph in a medical journal a few weeks ago, which gave an account of a sanitary inspectors' meeting, at which it was urged that these officials should qualify themselves to diagnose cases of fever? The treatment of fevers may be a popular question, but ought we to encourage the public to think that popular medicine, preventive or curative, is desirable?

One of my medical friends at Nottingham seems to have sent you the manifesto of the fifty-two practitioners of six years ago, when there took place among us that which you described at the time as "a lively difference of opinion." But the most perfect harmony prevailed afterwards, and has continued since, so that the conclusion to be drawn on the question of principle is probably the exact opposite of that intended.

I hope you will not consider me presumptuous if I indicate some of the medical points on which, I think, we as a whole profession might take our stand, as it were, on common ground in criticising or opposing legislative enactments for the compulsory notification of infectious diseases. The first of these I referred to in a paper at York about two years ago. I submit that we as a profession have a right to demand that, if notification is required of us, the sanitary organisation of the district authority to whom the notification is to be made shall be fairly complete. The striking inequalities in this respect in different areas is matter of notoriety. Very few of the large towns are on the same footing as regards their preventive medical service, and the case of London is quite exceptional owing to the almost entire severance of the sanitary authorities from the hospital authority. In the next place, the quality and management of the infectious hospital of a district is a matter which concerns us all. Some of the miserable structures called hospitals in various parts of the country are not at all the sort of places to which a practitioner could sanction the removal of a patient who is accustomed to home comforts. Again, the arrangements for the separation of cases of different diseases, also the amount and kind of medical supervision at hospitals, are points on which we ought to be satisfied as a body before notification is required of us. It might also be stipulated that in London, at any rate, there should be provision for clinical instruction at the hospitals devoted to the segregation of infectious diseases. Ought we not also to impress on the public the difficulty of distinguishing the different fevers in their early stages? Here the interests of individuals especially require to be safeguarded. Lastly, there is the question of the remuneration that medical practitioners are to receive for public services required of them. The member for Leicester recounted to the House of Commons on Friday last the story of how the town which he represents had been saved time after time from devastating epidemics of small-pox such as that which swept over Montreal in 1885. It is no figure of speech to say that, at least for a time, a similar disaster has been averted in the midland town. And how? Through machinery set in motion by a certificate, giving the skilled opinion of a medical practitioner, which is valued by the municipality at half-a-crown!—I am, Sirs, your obedient servant,

EDWARD SEATON.

George-street, Hanover-square, June 3rd, 1888.

To the Editors of THE LANCET.

SIRS,—As one of those to whose statistics Dr. E. M. Shirtliff, M.O.H., takes exception in his letter published by you to-day, I shall feel obliged if you will kindly allow me a few words by way of reply.

I cannot help expressing surprise that one whose chief function is to register cases of disease and death, and to

properly classify them, has stated in black and white that "statistics are useless in forming an opinion upon the matter" (that is, as to which system of notification produces the best results). He prefers "to rely upon common sense"! He also talks of his "experience," as if he had of his own knowledge found the single or householder system a failure when enforced by law. Dr. Shirtliff is medical officer of health for the borough of Kingston-on-Thames, and I can confidently say that during the fifteen years of his tenure of office there has been no system of notification whatever in force here. Instead of *experience*, in the proper sense of the term, he has nothing but a heap of assumptions to produce, and he is obliged to make a call on other people's experience by asking a question: "Will any sensible person argue or believe that a small shopkeeper &c. would ever send on the single notification?" Well, I do argue it, and I ask Dr. Shirtliff to rebut my statement without having recourse to statistics, which, he says, "are useless" for such a purpose. I contend that wherever the single system has been fairly tried it has proved a success, but that the dual system has failed over and over again, and I produce proof of this by the statistics which everyone but Dr. Shirtliff has a perfect right to use. The zymotic death-rates of the twenty-eight large towns are given for each of six successive years (which were not specially selected), and if we cannot judge from what we see in such a table I fear that statistics must indeed be doomed.

I am glad to see the protest of the profession in Nottingham against the surreptitious insertion of the objectionable notification clauses in a Gas Bill. There is too much of such quasi-dodgery, but it will not prosper. How any member of our once noble profession can consider it consistent with his sense of honour or *esprit de corps* to seek to foist upon his brethren a penal enactment, which places them in peril of being docked and fined for no worse crime than a regard for their patients' interests, passes my comprehension. I decline to admit that private practitioners have one whit less regard for the public welfare than those who boast so loudly of their benevolent feelings; but the system which compels a private practitioner to reveal what comes under his notice in his professional capacity is tyrannous and unjust, a departure from every principle of rectitude and fair dealing. We are required now to notify infectious diseases; we shall be required next to notify illegitimate births occurring in our practice or cases of concubinage coming under our notice, and all *pro bono publico*. How has that phrase been prostituted to uses more inhuman than even Rome or Sparta sanctioned! In the present instance the words are a plain echo of "Let us do evil that good may come," which has been condemned of old.

I am, Sirs, your obedient servant,

Kingston-on-Thames, May 26th, 1888. D. BIDDLE.

P.S.—Having, since writing the above, seen Dr. Whitelegge's letter commenting on the fact that the Nottingham protest is ten years old, I should like to add that he is scarcely correct in saying that the system opposed by the fifty-two medical practitioners "has now worked well and smoothly for years." The Nineteenth Annual Report of the Local Government Board (p. cxx.) distinctly mentions Nottingham as one of three towns (the others being Bradford and Norwich) "where the medical man has to give the required certificate to the occupier, who is responsible for its transmission to the authority." If the protest published a week ago was made in 1878, it is no doubt that which is referred to in the return regarding notification (April, 1882), as follows: "The medical men of the town drew attention to the stringency of the clause which compelled them to give notice to the medical officer of health of infectious disease. The clause was consequently modified, and it now compels the medical men to give notice to the head of the family." The sensible town clerk, Mr. Sam. Geo. Johnson, who makes the return, thus concludes: "One thing is certain, that stringent clauses such as those contained in Mr. Hastings' Bill would have excited the opposition of the medical profession, and they would have combined to defeat their operation." And here I would like to subjoin a recent utterance of the Home Secretary regarding the chief promoters of the Bill in question. In the course of a reply to Mr. H. H. Fowler, the Home Secretary said: "The Under-Secretary of State has, at my request, been in communication with the chairman of the Select Committee on Police and Sanitary Regulations, and with the counsel to Mr. Speaker, with the result that the chairman has promised to consult the committee as to the possibility of bringing to the notice of the House, in a manner more effective than that hitherto adopted, those matters upon which the standing orders bind the committee to make a special report. I should be unwilling to interfere with the discretion which the standing orders show that this House intended to rest in the committee, and which it exercises after hearing local evidence and obtaining local information, not usually accessible to any public department. Either the House must trust the committee to exercise the powers which the standing orders give it, or withdraw those powers altogether." In a somewhat similar strain, Lord Grimthorpe, in his evidence given before the Joint Committee on Procedure as regarded Private Bill Legislation, said, "From what he had heard of the Police and Sanitary Committee he did not think it would command confidence." (See *The Times*, May 16th.)

D.B.

To the Editors of THE LANCET.

SIRS,—Dr. Whitelegge's suggestion of a *suggestio falsi* is, as it happens, a *suggestio falsi* itself. You asked for the sentiments of the profession, and it struck me that the position which, in my opinion, medical men ought to assume was tersely put in the memorial, a printed copy of which I forwarded to your office. Being very much occupied, I gave little thought to the matter, and, unfortunately, it never occurred to me that you might deem the document a recent one; not that the date can matter, of course, as it is simply a statement of principle, and as such good for all time. We have no right whatever to accept the part of informers (directly or indirectly) in any sense hostile to the interests of those who employ us; I cannot conceive a more flagrant breach of trust. I am not in general practice myself, but my friends who are tell me that the clause, so far as Nottingham is concerned, is a mere *brutum fulmen*, and might just as well never have existed; it was inserted according to a pernicious practice into a Gas Bill in 1878, and no one knew anything about it for some years, when it was unearthed by our late medical officer of health, who by so doing gave rise to the protest in question. Is Dr. Whitelegge, who so freely accuses others of *suggestio falsi*, quite candid himself when leading your readers to suppose that the memorial was ten years old?

I am, Sirs, your obedient servant,

June, 1888. BELL TAYLOR, M.D.

ACUTE AND PAINFUL VALGUS.

To the Editors of THE LANCET.

SIRS,—The Norwegian case, in your issue of June 2nd, appears to be one of over-strained ligaments in a subject already somewhat flat-footed. The peculiar appearances of the skin are probably explained by the defective innervation which, with defective circulation, so often exists in these cases. That there was no continuing synovitis is clear, because "passive movements" relieved the severe pain. Presumably then, plaster of Paris was used for holding up the arch in a corrected position; but this involves, as I contend, an erroneous notion both as to how the arch is in nature maintained and as to the object of its existence. The indication for treatment in such a case is, after a short period of rest, to strengthen the muscles, whose tendons, crossing the sole, act as bowstrings or tie-rods to the arch, so that all strain shall be taken off the ligaments; but not only does a plaster-of-Paris bandage tend to render these muscles inactive, but it presses on and interferes with the functions of the short muscles of the sole; the very object of the arch, in my view, being to avoid any such pressure. I see no reason why the plan I have recommended, with cases giving results at least as striking as any in the literature of flat-foot,[1] should not have been adopted in this instance. Had it been so, I do not think that the patient would, at the end of two months, have needed a stick for walking. The full benefit of muscular exercise for such a case can be obtained in raising a weight by means of a cord running over pullies, the weight relieving the downward pressure of the body and compelling a grip of the ground in the downward pull. Pain in doing this, at first always felt, soon ceases.

I am, Sirs, yours faithfully,

Gloucester, June 4th, 1888. T. S. ELLIS.

[1] THE LANCET, Feb. 9th, 1884, and Sept. 25th, 1886. Reproduced in the Berlin Centralblatt für Orthopädische Chirurgie, May 1st, 1887.

THE METROPOLITAN HOSPITAL FUND.

To the Editors of THE LANCET.

SIRS,—Will you permit me, as president and treasurer of the Hospital Sunday Fund, to ask your kindly assistance in reminding the public that on Sunday next, being Hospital Sunday, collections will be made in the churches and chapels of London in aid of our hospitals and dispensaries.

Hospital Sunday is the one day in the whole year when men, women, and children alike, of all creeds and denominations, have the privilege and opportunity of helping the sick poor in their midst. This year the Council have 116 hospitals seeking relief from the Fund, 18 of which are hospitals for convalescents. There are also no fewer than 51 dispensaries applying for awards. To cover the pressing needs of all these institutions in respect of their last year's work a sum of £100,000 is still urgently required.

In our London hospitals and medical charities we have persons of every nationality, and I venture to think that the thousands of foreigners in London, who are here reaping the benefit of our great and liberal Constitution, will know how on this day to express their appreciation of, and gratitude for, the blessings they are here enjoying.

I am especially anxious now, on the eve of these annual collections, to ask everyone in our great City and its suburbs to make a determined effort to increase the amount of the Fund this year to £50,000. This would be a practical way of recognising the debt of gratitude we all owe to these charitable institutions, and an effectual means by which the people of London could give expression to their sympathy for the sick and suffering poor around them. Like my predecessors, I shall be glad to receive at the Mansion House the contributions of any who may be absent from London on Hospital Sunday, or who may otherwise be prevented from attending a place of worship and contributing to the Fund through the offertory. Commending this appeal to the liberality and generosity of the inhabitants of the metropolis,

I am, Sirs, your obedient servant,

Mansion House, June 7th, 1888. P. DE KEYSER, Lord Mayor.

ARTIFICIAL GLYCOSURIA.

To the Editors of THE LANCET.

SIRS,—That glycosuria can be, as pointed out by Mr. F. W. Burton in your issue of June 2nd, so readily developed by salicylic acid in the human subject is of considerable interest from various points of view. Among others, it has an important bearing as to the part played by the nervous system in rheumatic fever. In this disorder a patient is placed fully under the influence of the salicylates, toxic symptoms are developed, such as deafness, singing in the ears, &c., the temperature then declines, the rheumatic pains are relieved, and, simultaneously with the development of these toxic symptoms, sugar appears in the urine. By a curious transposition of a semicolon in Mr. Burton's paper, he is made to say that glycosuria is present *before* deafness &c. appear; but this is not the case, and the point is important. The sentence in his letter should run as follows:—"This glycosuria is, however, only present when the patient shows the nervous toxic symptoms of salicysm; and before deafness, singing in the ears, &c., appear, though perchloride of iron shows the presence of salicyluric acid in the urine, I have not found any sugar." Mr. Burton is still investigating the subject, and I hope that more light may be thrown on the pathology of diabetes and rheumatism by his observations.—I am, Sirs, yours faithfully,

Cambridge, June 4th, 1888. P. W. LATHAM.

RHEUMATIC PNEUMONIA.

To the Editors of THE LANCET.

SIRS,—In February last I attended a case similar to those described by Dr. Cheadle in his interesting clinical lecture published in THE LANCET of the 5th inst. The salient points of the case are as follows. The patient was a strong healthy girl of eighteen; no history of previous rheumatism. As a result of severe exposure she developed acute rheumatism with pronounced arthritis and a steady temperature of 103° F. In a few days pericardial friction was observed, and shortly after evidence of effusion; the breathing became rapid, 40 per minute; and there was a frequent short dry cough. Her lungs were examined daily, but no abnormal physical signs were discovered until the fifth day after the commencement of the pericarditis, when I found an area of dulness just below the angle of the left scapula; in this area the breathing was tubular, without accompaniments, and the vocal resonance increased; there was no rusty sputum, nor did the temperature become further elevated. Until this time the patient had been taking salicin, but quinine was now substituted for it, and under this treatment she gradually improved, being convalescent within a month after the commencement of the disease. The occurrence of the pneumonic consolidation did not appear to produce any effect upon the course of the malady.

These cases seem to be widely separated from an ordinary exudative pneumonia. 1. They seem to have been invariably preceded by pericarditis. 2. The lower lobe of the left lung was affected in each case. 3. There was no rusty sputum and no cough, except in my case; crepitation was absent or comparatively slight in amount. 4. There was very little or no influence on the temperature and course of the disease. The consolidation seems to be passive in its nature and I am inclined to believe it to be due to pressure of an enlarged pericardium, probably containing fluid, upon the pulmonary tissue behind it, this effect being increased by the sluggish circulation and lessened vitality of the lung, and the constant recumbency of the patient. I have observed a similar occurrence in the case of a heart greatly hypertrophied as a result of aortic disease. I may add that in my case there was no old cardiac lesion; a mitral murmur was heard during the time the pneumonia was present, but it disappeared when convalescence was established.

I am, Sirs, yours faithfully,

Abergavenny, May 10th, 1888. LEO D. GAMBLE, M.B., C.M.

REMOVAL OF DISEASED OVARIES.

To the Editors of THE LANCET.

SIRS,—Kindly allow me a little space in explanation of an opinion attributed to me by Dr. Bedford Fenwick in his valuable memoir on "Cardiac Degeneration from the Pressure of Abdominal Tumours" in THE LANCET of June 2nd. He quotes me as saying, "Ovariotomy should not be performed while the tumour is small, nor until the constitution has undergone some degree of impairment." That was written long ago. For years past I have advocated and practised early operation. As a general rule, the sooner a diseased ovary is recognised and removed the better. My conviction of the truth of this rule is strengthened by the great pathological argument so well illustrated by Dr. Fenwick. I am, Sirs, yours faithfully,

Harley-street, June, 1888. ROBERT BARNES.

THE DRAINAGE OF MARGATE.

To the Editors of THE LANCET.

SIRS,—With reference to the drainage of Margate, to which you referred last week, it may interest you to learn that the inhabitants fully determined last autumn to follow the urgent solicitations of the press and the public. The difference of opinion that exists in the town refers to the action of a certain majority of the Town Council, which has invited Mr. Baldwin Latham to send in plans, without calling upon any other celebrated engineers to compete with him. The burgesses have petitioned the Council from time to time, and have held several mass meetings, urging the Corporation to call in other engineers to compete; but up till now they have been ignored by their representatives. The feeling among the burgesses is practically unanimous, and the movement is strongly supported by all the medical men and the chief inhabitants. It is felt that it would be difficult for the best-intentioned assessors to condemn the plan of a brother engineer of celebrity, but with two or three plans to choose from there could be no hesitation in selecting the most appropriate. It will thus be seen that the inhabitants are earnestly endeavouring to secure the best possible advice, and are making laudable efforts to ensure the selection of the best of the many systems of sewerage in vogue at the present day. I may add that perhaps the most important suggestion in Dr. Page's report of last year has been energetically carried out, and the town will no longer be supplied with questionable

drinking water, a new well having been sunk in a valley at some distance from the borough, which is absolutely free from suspicion of contamination with noxious matters. It is only fair to point out that, in spite of the primitive system of drainage, the health of the inhabitants and visitors during the last twelve months or more has been excellent, and the zymotic death-rate compares very favourably with the best of the leading health resorts.

I am, Sirs, yours faithfully,

June, 1888. A MEDICAL RESIDENT.

"OSTEO-PLASTIC RESECTION OF THE FOOT BY THE METHOD OF MIKULICZ."

To the Editors of THE LANCET.

SIRS,—Dr. Alfred Swann, in THE LANCET of May 19th, asks if there can be any sound objection to his operation for the removal of the os calcis and astragalus. May I be permitted to point out that Professor Billroth, in his Lectures on Surgical Pathology and Therapeutics,[1] fully discusses the operation in question, and condemns it as an inferior surgical procedure to a Syme's exarticulation in chronic disease of the tarsus. The passage runs: "We may, therefore, extirpate ..... even the talus or the calcaneus; but to remove both talus and calcaneus, and perhaps also saw off the articular surface of the tibia, would, even if healing took place, leave a rather useless foot, which is of less value than a good amputation stump." The facts on which Professor Billroth founds his opinion then follow, and may be consulted by anyone interested in the matter. On the other hand, it must be confessed that Dr. Swann's case contains that element of success which is so powerful a factor in every argument.—I am, Sirs, yours obediently,

ALEX. G. R. FOULERTON, M.R.C.S.

St. Bartholomew's Hospital, Chatham, May 23rd, 1888.

THE COUNCIL OF THE COLLEGE OF SURGEONS.

To the Editors of THE LANCET.

SIRS,—I observe in your issue of June 2nd a statement to the effect that I am likely to seek re-election to the Council of the College of Surgeons. In order to avoid misunderstanding, I ask permission to say through your columns that it is not my intention to do so.

I am, Sirs, yours faithfully,

Park-crescent, June 4th, 1888. JOSEPH LISTER.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

To the Editors of THE LANCET.

SIRS,—I enclose copy of a petition signed yesterday afternoon, May 31st, at a meeting of the Central Committee of this Association held at the Charing-cross Hotel. The petition has been forwarded this day to the Privy Council.

I am, Sirs, yours faithfully,

WM. ASHTON ELLIS, Hon. Sec.

Grosvenor-road, Westminster, June 1st, 1888.

To Her Most Gracious Majesty the Queen in Council.

The humble petition of the undersigned Members of the Royal College of Surgeons of England sheweth:—

1. That your petitioners are Members of the said Royal College of Surgeons, and of the Association of Members thereof.

2. That on the third day of May, in the year 1887, a petition signed by four thousand six hundred and sixty-five Members of the said College, including your petitioners, was presented to your Majesty's Privy Council setting out the claims of the Members of the said College to a just share in the administration and control of the property and affairs of the said College upon grounds of public policy and of equity, having regard to the original constitution, history, and office of the said College.

3. That a deputation of delegates, representing a large proportion of the Members of the said College, including also a large number of the Members thereof, attended before your Majesty's Privy Council on the eleventh day of November, 1887, in support of the said petition, and conveyed to the Right Honourable the Lord President their request to be heard by Council in support of their said petition if your Majesty should not otherwise be advised that their claims ought to be permitted.

4. Your petitioners are informed and believe that no communication relative to the said petition has since been addressed either to the said Association of Members of the Royal College of Surgeons of England or to the Members of the said deputation, or to the signatories of the said petition.

5. Your petitioners are further informed and believe that, although a copy of the statement made on the eleventh day of November, 1887, when the said deputation was received, has been submitted by your Majesty's Privy Council to the President and Council of the Royal College of Surgeons, no answer to the said statement or to the contentions of the Members of the said College has been made by the President and Council of the College.

6. Your petitioners have heard with surprise that a proposal has nevertheless been made to the President and Council of the said College signifying an intention to grant a Supplementary Charter limited to certain points in which, so far as your petitioners are informed, the aforesaid claims and rights of your petitioners are not recognised in any way; but, on the contrary, the existing elements in the constitution and administration of the said College against which your petitioners and the Members generally protest, will be further strengthened.

7. Your petitioners therefore humbly pray that your Majesty will be graciously pleased to refer the matters in this present petition, together with the said petition, signed by 4665 Members of the said College hereinbefore referred to, and the statement submitted on the eleventh day of November, 1887, for the consideration of your Majesty's Privy Council or some of the members thereof sitting in judicial capacity, with power to hear all parties interested in the matter of these said petitions, by counsel and otherwise, and to receive evidence thereon; and humbly to advise your gracious Majesty in the premises as to your Majesty may seem fit.

And your petitioners, as in duty bound, will ever pray, &c.

BIRMINGHAM.

(From our own Correspondent.)

A NEW HOSPITAL.

THE new building of the Birmingham and Midland Skin and Lock Hospital was opened on May 31st by the President, Mr. W. F. Inge. The movement originated with the late Dr. Heslop, whose zeal in the foundation and administration of hospitals was manifested by his untiring advocacy and interest for their promotion. The present hospital is the only one of the kind within eighty miles of the town; and in the midst of a large population there is ample scope for the services of the skilled professional staff whose time is at the command of the institution. The readiness with which such services can be obtained is shown by the circumstance that for the vacancy at present advertised there are seven local candidates of high academic distinction and good standing in the town.

THE SWEATING SYSTEM.

Considerable interest has been shown in the able articles which have appeared in THE LANCET in reference to this obnoxious practice in Birmingham. At a meeting of the Town Council held on the 5th inst., the justice of the review was admitted, and its fairness not questioned. Several members of the Council were disposed to take active steps to diminish the evil as far as possible. The difficulty of authority was felt to be a drawback; but a hope was expressed that, by the attention called to the matter, the public would recognise the faults which are embraced by those who are implicated in the continuance of such a pernicious system.

POST-GRADUATE LECTURES.

The committee of the Medical Institute have invited the members of the profession to attend a course of four lectures given by Mr. Bennett May, the subjects being the Hygiene of the Bladder, Inflammation in the Right Iliac Fossa, and two lectures on Diseases of the Rectum. The known ability of the lecturer and the practical nature of the subjects ought to command a good audience. It is to be feared that there has not been a due appreciation of the advantages offered, or the attendance would have been larger than it has been at the lectures already delivered. There is hardly enough excitement in the ordinary acquisition of knowledge to ensure an audience, and in the present day of work and routine the sensation afforded by sound devotion to teaching does not appear to draw sufficiently to command the success deserved.

THEFTS AT MASON COLLEGE.

It is a matter of deep regret that a medical student was sentenced to a month's imprisonment on Monday last for stealing a pair of opera-glasses from the College, the property of the secretary. For some time past various things had been lost, and a detective being employed to watch, the delinquent was caught in the act. The offence was

[1] New Syd. Soc. Transactions, 1878, vol. ii., p. 248.

admitted, no adequate excuse being shown. In the interest of the College some protection was thought necessary. The punishment carries with it the ruin of a promising career, and the sorrow of all who have a care for the good of the young in any pursuit or calling.

A QUARANTINE WARD.

At a meeting of the Town Council, held on the 5th inst., the Health Committee recommended the construction of a quarantine ward, at the cost of £1600, to accommodate three male and three female patients, and a nurse in charge. It was shown by the chairman how much the mortality of scarlet fever had diminished by the provision made by the Borough Hospital—namely, from 406 per annum in the period from 1873 to 1877, to 113 per annum in the time from 1883 to 1887; and also that the hospital was very popular. The resolution was carried.

DUBLIN.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE annual elections for President, Vice-President, Secretary, and Council took place last Monday, the 4th inst. Mr. Henry Fitzgibbon was elected President, and the contest between Drs. Austin Meldon and William Frazer resulted in the former being returned as Vice-President by a large majority; while Mr. William Colles was re-elected Secretary. For seats on the Council there were twenty-five candidates for nineteen places, all the outgoing members being re-elected, with the exception of Mr. Elliott and Mr. Chaplin of Kildare, the latter gentleman having retired. The three new members of Council are Mr. Richard Tobin, surgeon to St. Vincent's Hospital and lately an examiner in surgery, Royal College of Surgeons; Mr. John Story, surgeon to St. Mark's Ophthalmic Hospital: and Mr. Theodore Stack, professor of dental surgery in the medical school of the College of Surgeons. The voting papers this year show a decrease as compared with last year. About 217 votes were recorded, as against 230 in 1887; while the lowest number of votes which any of the successful candidates obtained last year was 148, as contrasted with 127 on this occasion. As I mentioned last week, Mr. H. Gray Croly, senior surgeon to the City of Dublin Hospital and an examiner in surgery, Royal College of Surgeons, is a candidate for the vice-presidency of the College next June. Mr. Croly is a distinguished surgeon, has an extensive practice, and is in every respect well fitted to discharge the duties of the high position he seeks. I do not think he will be opposed, although it is rumoured that another candidate may come forward.

A NEW BARRACKS FOR DUBLIN.

The War Department are about to construct a new Mountjoy Barracks on a plot of ground belonging to the Government near the Phœnix Park. The barracks are intended primarily for the accommodation of a regiment of cavalry, but as the space at the disposal of the authorities (some twenty acres) is ample, it is probable that some infantry may be located there, transferred from the Royal Barracks.

ROYAL UNIVERSITY OF IRELAND.

This University, following the example of the University of Dublin, is about to forward an address of congratulation to the University of Bologna on completing the 800th year of its existence. It is on vellum, elaborately illuminated, contains the Royal University arms in colours, and is a very handsome work of art. Mr. Dunne, one of the secretaries, has been deputed to present the address.

THE PHARMACY ACT (IRELAND).

The Pharmacy Act (Ireland), 1875, Amendment Bill, which is promoted by the Pharmaceutical Society of Ireland, is down for second reading on the 7th inst. The Act of 1875, it appears, contained no provision for the registration of chemists and druggists who were practising in Ireland at the time of the passing of the Act; but the present Bill provides for this registration, and also that establishments in which poisons are sold or prescriptions dispensed shall be personally managed by duly qualified persons. The Act will enable any person who has commenced business as a chemist and druggist since August, 1875, to be registered and to continue the sale of poisons on passing an examination showing an elementary knowledge of chemistry and drugs.

Dublin, June 5th.

PARIS.

(From our own Correspondent.)

THE CONTAGIUM OF PUERPERAL FEVER.

DR. LEDOYEN of Reims lately made a communication to the Academy of Medicine on the contagious properties of puerperal fever. The author remarked that doctors and midwives who had attended lying-in women affected with puerperal fever might communicate to other patients the contagion, under the form of erysipelas. Dr. Ledoyen concludes from this that the two maladies must be produced by the same bacillus. Dr. Cornil, who was charged by the Academy to report on this paper, observed that from his own experience he was led to think that the two affections might be engendered the one by the other. He stated, however, that science cannot, for the moment, give a definitive judgment on the question, but that nevertheless a place of honour should be accorded to the conscientious researches made by Dr. Ledoyen.

THE NEW MUSEUM OF THE HÔPITAL SAINT-LOUIS,

referred to in a former letter, is to be officially inaugurated about the middle of August next year. On that occasion, and owing to the probable afflux to Paris of medical men from the provinces and from other countries on account of the Great Exhibition, the medical staff of the Hôpital Saint-Louis have judged the moment favourable to organise an International Congress of Dermatology and Syphilography. This Congress, which will last a week, will be held in the great hall of the museum of the hospital, under the presidency of MM. Ricord and Hardy.

INOCULATION OF DOGS.

The Governor of Paris has ordered the exclusion of dogs from all military quarters and establishments. The dogs intended for outposts during war and those attached to regiments are to be inoculated according to Pasteur's method.

M. JACQUES DAVIEL.

A subscription is being raised, and the Municipal Council of Paris have taken part in the undertaking, for the purpose of erecting a monument to the memory of Jacques Daviel, the inventor of the method of the extraction of cataract which bears his name.

MUSEUM OF HYGIENE.

A new museum of hygienic appliances was opened in this city on the 3rd inst., under the auspices of the Hygienic Committee of the Faculty of Medicine. The collection is located on the first floor of the new School of Medicine, and will for the present be open every week day from half-past one to five o'clock, but only to medical men and students. On one day of each week comments on the exhibits will be made, and demonstrations of their use given. The director of the collection is Dr. Martin, and a further announcement is to be made with regard to the admission of the general public.

Paris, June 5th.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—The annual dinner of the members of this Society was held on the 2nd inst., at the Criterion Restaurant, Mr. C. B. Keetley, President and Founder, being in the chair; there was a very numerous gathering of members and their friends. Sir Andrew Clark, in proposing the toast of "The Society and its Founder," took occasion to emphasise the value of such an association, composed for the most part of general practitioners, who had before them opportunities of studying the natural history of disease to an extent and in a manner impossible to the consultant. He likewise insisted on the superiority of the exhibition and discussion of living cases over the mere reading of papers. The toast of "The Cavendish Lecturer and Guests" was replied to by Sir W. Stokes and Sir Charles Cameron. Some excellent vocal and instrumental music filled the intervals between the speeches.

Obituary.

PROFESSOR POLITZER.

THE subject of "Children's Diseases" has lost one of its ablest students in this septuagenarian physician, who died at Vienna on the 23rd ult. He first became known to German and European medicine as assistant to Professor Mauthner in St. Anna Hospital for the Diseases of Childhood, in which capacity he amassed the knowledge and experience which he afterwards embodied in many treatises. In 1850 he undertook the conduct of the first public institute for sick children, to which he gave much of his time and attention gratuitously until his voluntary retirement from the post in 1882. Earlier in his career Professor Politzer was "Docent" in the Viennese University, and from the year 1875 he became Extraordinary Professor in the same seat of learning. It was in 1853 that he founded, in conjunction with Drs. Mayer and Schuller, the *Jahrbuch für Kinderheilkunde*, a journal which still holds a high position on the diagnosis and treatment of children's diseases. His independent authorship on the same subject extends to fifteen treatises, all of them marked by painstaking and sagacity.

Medical News.

THE Ostend Exhibition of Hygiene and Life-saving Apparatus will be opened on the 30th inst.

ON the 30th ult, a new hospital at Southend, which has been erected as a permanent memorial of the Queen's Jubilee, was opened by Mrs. Rasch.

HOSPITAL SUNDAY at Windsor and Eton is fixed for June 24th, when collections will be made in all the public places of worship in the district.

CAPITAL PUNISHMENT IN AMERICA.—The Governor of New York has signed the Bill abolishing hanging and substituting electricity as a means of capital punishment. The measure will take effect from January next.

A CENTENARIAN.—Rebecca Grovenor, of Newtown, Montgomeryshire, has just died at the age of 104 years and three months. She is said to have been able to thread a needle or read printed type without the aid of glasses.

HOSPITAL FOR DISEASES OF THE CHEST, BROMPTON.—On the 28th ult. the Princess Christian showed her kindly interest in the sick poor by paying a private visit to the above hospital, to take part in a concert for the benefit of the inmates.

THE FEVER HOSPITAL QUESTION, NORTH BIERLEY UNION.—In compliance with the wishes of the respective districts comprising this union, the Local Government Board has issued a provisional order, forming Cleckheaton, Hunsworth, North Bierley, and Tong into one united district for hospital purposes.

LUNATIC ASYLUMS.—A Parliamentary paper has just been issued containing a return of the number and distribution of lunatics in England and Wales on Jan. 1st, 1888, as reported to the Commissioners in Lunacy, distinguishing the sexes, and showing the class—whether private, pauper, or criminal—to which they belong.

VOLUNTEER MEDICAL SERVICE.—On Tuesday afternoon a deputation of medical gentlemen connected with the Volunteer service were told in an interview with Mr. Stanhope at the War Office that he thought it would be best to appoint a committee to consider all the points connected with the Volunteer medical organisation.

HOSPITAL SATURDAY IN LIVERPOOL.—The total amount collected up to date from the Hospital Saturday boxes is £2695; but, as there are some 250 boxes to come in, this amount will be increased. The depression in trade and commerce still continues to be very marked, and, if the amount reaches £3000, this will be as much as can be expected.

MEDICAL MAGISTRATE.—MR. Theophilus Richards Hamlen, of Fairfield, Pontypridd, and the Middlesex Hospital College, student of medicine, has been placed on the Commission of the Peace for the county of Glamorgan.

PORTSMOUTH HOSPITAL.—On the 30th ult. the Bishop of Winchester reopened this institution. It was decided last year to raise a fund to be spent on the hospital as a local celebration of the Jubilee, it being hoped that sufficient money would be collected to enable the committee to erect an entirely new building. The fund, however, only reached a little over £3000, and with this sum the interior of the hospital has been entirely reconstructed on modern principles, and the number of beds increased from 70 to 104.

CORONERS' SOCIETY.—The annual meeting of the Coroners' Society of England and Wales was held on the 31st ult. at the Albion, Aldersgate-street. The chair was occupied by Mr. S. F. Langham (president of the Society). The hon. secretary, Mr. Wynne E. Baxter, read the annual report, which was a very interesting one, and was received and adopted, and a vote of thanks to Mr. Baxter was passed for his trouble in preparing the same. The Committee of Management for the ensuing year was elected. Several matters of interest to coroners, including the Coroners Bill and the Local Government Bill, were discussed.

EAST LONDON HOSPITAL FOR CHILDREN.—The twenty-first report of the Board of Management of this hospital at Shadwell was placed before the annual court of governors on the 31st ult. It stated that of the 19,268 new patients during the year 1348 had been out-patients (women), 6829 out-patients (children), 2436 casualty cases (women), 7652 casualty cases (children), and 1003 in-patients. The total receipts had amounted to £9629, as compared with £7053 during the preceding year; but of this sum £2110 (the proceeds of the bazaar held in June at the Westminster Town-hall) were only available for the building fund. The report was adopted.

THE MEADOWS MEMORIAL FUND.—A meeting of some of the friends and patients of the late Dr. Alfred Meadows was held at the residence of Mr. James Watson in Portman-square, to consider certain matters in connexion with this fund. About £216 has been already collected. It is proposed to put up in the parish church of Colnbrook (where Dr. Meadows had his country seat) a carved wooden pulpit, and also to found a biennial or triennial prize for students of St. Mary's Hospital, with which Dr. Meadows was for many years connected, to be called "The Meadows Prize." Subscriptions may be sent for this latter object to the London and County Bank, Slough; to the Rev. R. Parry-Burnett, Vicar of Colnbrook; or to Mr. Watson, at 38, Portman-square.

BEQUESTS AND DONATIONS.—The late Mrs. Barbara Cape, of Cadogan-square, Chelsea, has bequeathed £100 each to the Hospital for Sick Children and the National Hospital for Consumption, Ventnor.—The Mercers' Company has just contributed £105, and the Grocers' Company £100, in aid of the Royal National Hospital for Consumption at Ventnor.—The workmen and firemen employed by the Cunard Steamship Company have handed to the honorary treasurer of the Bootle Borough Hospital £24 6*s.* 8*d.* in aid of that charity.—Mr. William Pratt, of Bilston, bequeathed handsome legacies to Wolverhampton, Walsall, and Birmingham institutions. To the Wolverhampton Hospital he has left a legacy of £1000, and one of £1000 to the Wolverhampton Orphan Asylum. He has also bequeathed £300 to the Wolverhampton Eye Infirmary, the sum of £500 to the Walsall Cottage Hospital, and £500 to the Birmingham Eye Infirmary. The legacies in each case are left free of duty.—St. Mark's Ophthalmic Hospital, Dublin, has received £100 under the will of the late Mrs. Mary Hotchkiss.—The late Sir Robert Loder, Bart., of Grosvenor-square, London, has left by his will the following legacies, duty free: £3500 to the Hospital for Incurables at Putney, £2500 to the Cancer Hospital and to the Hospital for Consumptive Patients at Fulham; £1500 each to the Sussex County Hospital at or near Brighton, to the Chichester Infirmary, and to the All Saints Convalescent Home at Eastbourne; £1000 each to the Salisbury Infirmary, the Northampton Infirmary, St. George's Hospital, Middlesex Hospital, Charing Cross Hospital, the Worthing Infirmary, the Seaford Convalescent Home, and the Ventnor Consumption Cottage Hospital, and £500 to the Western Dispensary, Westminster.

TESTIMONIAL.—Dr. Beatty has been presented with a tea and coffee service and address by the students past and present of the Adelaide Hospital, Dublin, also with a salver from the nurses of the hospital.

FROM a statement of accounts in connexion with the Football Charity Festival, which has just been published by the secretary, it appears that the receipts amounted to £299, of which £100 has been devoted to Guy's Hospital, £100 to the London Hospital, and £15 each to the Railway Benevolent Institution and the Metropolitan Public Gardens Association.

VOLUNTEER MEDICAL STAFF CORPS: 4TH (MANCHESTER) DIVISION. — On the recommendation of the Commander-in-Chief, the Secretary of State for War has given his permission for another Bearer Company to be raised in Manchester. The company will consist of three surgeons, one quartermaster, seven sergeants, two buglers, and eighty-seven men; total, 100.

FOUL DRINKING WATER.—At a meeting of the Hornsey Local Board, on the 4th inst., the sanitary inspector reported that he had examined the cistern which supplied ten cottages in North-road, Highgate, with drinking water, and found it in a fearful condition. The bottom was covered with thick slime, and he found in it a quantity of whelk shells, a number of dirty jars, a mouse-trap, a large portion of a domestic utensil, an Italian iron, a quantity of iron hooping, a piece of soap, a lump of rotten wood, and some brown paper.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following office-bearers have been elected for the ensuing year:—President: Henry Fitzgibbon. Vice-President: Austin Meldon. Secretary: William Colles. Council: William Colles, Sir George Porter, George Kidd, Rawdon Macnamara, Edward Hamilton, Robert McDonnell, J. Kellock Barton, Philip Crampton Smyly, Edward H. Bennett, Sir William Stokes, Anthony Corley, Wm. Stoker, William J. Wheeler, William Carte, Sir Charles A. Cameron, R. Theodore Stack, Kendal Franks, J. Benjamin Story, and Richard Francis Tobin.

MEDICAL NOTES IN PARLIAMENT.

The Case of Dr. Burke.

IN the House of Commons, on the 4th inst., Mr. C. Kenny asked the Secretary of State for the Home Department whether he could inform the House as to the grounds on which the sentence of death passed at the late Leeds assizes upon Dr. Burke for the murder of his daughter had been commuted to one of penal servitude.—Mr. Matthews, in reply, stated that, after personal consultation with the learned judge, and in consideration of the medical testimony which he received after the trial as to the mental condition of the prisoner, he felt it his duty to advise the Crown to exercise the prerogative of mercy in this case.

English Medical Men in Switzerland.

In the House of Commons on the 5th inst., replying to Dr. Farquharson, Sir James Fergusson said it was true that legally qualified medical practitioners had lately been fined and threatened with imprisonment for practising among invalids visiting Swiss health resorts. The laws of Switzerland did not permit foreign doctors to practise there without the Federal authorisation. Her Majesty's Government had been endeavouring to arrange with the Swiss Government reciprocal privileges for the medical profession in either country, but as yet without success.

State Regulation of Vice.

Mr. Walter M'Laren called attention to the existence and working of the Contagious Diseases Act and of the Cantonment Acts in India, and moved: "That, in the opinion of this House, any mere suspension of measures for the compulsory examination of women, and for licensing and regulating prostitution in India, is insufficient, and the legislation which enjoins, authorises, or permits such measures ought to be repealed."—Sir R. Fowler supported the motion, and amongst other speakers on the subject were Sir Walter Foster, Sir John Gorst, and Sir R. Temple.—The motion was eventually carried without a division.

The Victoria University Bill and the Habitual Drunkards Act Amendment Bill.

On the 6th inst. these Bills passed through committee.

Public Health Diplomas.

In the House of Commons on the 7th inst., Sir Guyer Hunter asked the President of the Local Government Board would he state if it is the intention of Government to insert a clause in the Local Government Bill rendering it necessary for gentlemen appointed medical officers of health to possess a public health diploma, such diploma having now obtained State recognition by the Medical Act of 1886, Section 21.—Mr. Ritchie was understood to say, in reply, that he did not propose to introduce into the Bill a clause rendering it essential that medical practitioners, in order to qualify as medical officers of health, should possess a public health diploma. No doubt the authorities would be strong enough, and the competition sufficiently keen, to secure the election of suitable candidates.

Births, Marriages, and Deaths.

BIRTHS.

HANLY.—On the 13th ult., at Buenos Ayres, the wife of Edward Hanly, M.D., of a son.

MACDONOGH.—On the 30th ult., at Twickenham, the wife of Wm. Fredk. MacDonogh, M.D., of a daughter.

MOUAT-BIGGS.—On the 28th ult., at Abbey-row, Malmesbury, the wife of C. E. F. Mouat-Biggs, M.R.C.S., L.R.C.P.Lond., of a daughter.

NEALE.—On the 4th inst., at London-road, Leicester, the wife of J. Headley Neale, M.B., M.R.C.P., of a son.

PLAYFAIR.—On the 4th inst., at Rutland-street, Edinburgh, the wife of John Playfair, M.B., F.R.C.P.E., of a son.

MARRIAGES.

CLIFTON—COBBY.—On the 5th inst., at St. Matthias's Church, Sheffield, Fredk. W. Clifton, M.R.C.S., L.R.C.P., of Glossop-road, Sheffield, to Alice Maud, eldest daughter of the late G. K. Cobby, of Tudor Lodge, Pitsmoor.

ELKINGTON—BADDELEY.—On the 4th inst., at the Parish Church, Newport, Salop, Ernest Alfred Elkington, M.B.Lond., to Annie Isabella, elder daughter of the late Wm. Edward Baddeley, of Newport, Salop.

LANGTON—JOHNSTONE.—On the 31st ult., at St. Nicholas' Church, Brighton, by the Rev. C. Watson Bond, Herbert Langton, M.R.C.S., to Edith Caroline, only daughter of Athol A. W. Johnstone, F.R.C.S., of St. Moritz House, Brighton.

ORD—HAWKINS.—On the 5th inst., at All Saints', Clapham-park, by the Rev. F. S. Colman, M.A., brother-in-law of the bride, assisted by the Rev. A. G. Girdlestone, M.A., Vicar, and the Rev. Wodehouse Raven, M.A., Vicar of Christ Church, Streatham, George William Ord, M.R.C.S., of Mildenhall, Suffolk, eldest son of George Rice Ord, of Streatham-hill, Surrey, to Edith Emily Lucy, third daughter of Charles F. Hawkins, of Belmont, Clapham-park.

WILLIAMS—MARTIN.—On the 28th ult., at Holy Trinity Church, Gravesend, by the Rev. George Barr, M.A., Vicar, R. R. Williams, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., of West-green, London, N., to Elsie Emily Martin, of The Mount and The Terrace, Gravesend.

DEATHS.

CLAPP.—On the 27th ult., at his residence, 14, West Southernhay, Exeter, William Clapp, Esq., F.R.C.S.Eng., L.S.A., aged 74.

DULLEY.—On the 30th ult., at his residence, Brooklands, Wellingborough, Benjamin Dulley, F.R.C.S., aged 80.

FALLON.—On the 29th ult., at Bellevue, Tulse-hill, S.W., Joseph Septimus Fallon, L.R.C.P. & L.R.C.S.Ed., L.S.A., aged 33.

HOVELL.—On the 5th inst., at Boreham Holt, Elstree, Hertfordshire, Dennis De Berdt Hovell, F.R.C.S.Eng., aged 70.

TATHAM.—On the 13th ult., at Denver, Colorado, Garnett Geo. Tatham, M.D., of Wigan, late Senior Surgeon, 3rd Lancashire Fusiliers, and only brother to Dr. Tatham, of Salford, aged 34. Friends please accept this intimation.

WATTIE.—On the 26th ult., at Glenbucket, Charles Lindsay Wattie, M.D., C.M.Aber.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

ALLAN, HECTOR, M.B., C.M.Univ.Aber., has been reappointed Medical Officer of Health for the Yeardsley-cum-Whaley Urban Sanitary District, Cheshire.

ALLEN, JAMES, L.R.C.P.Edin., L.M., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Bollington Urban Sanitary District, Cheshire.

BATES, CHARLES POPE, M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Ramsey Urban Sanitary District, Huntingdonshire.

BLUETT, JOHN, M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Chesterfield Urban Sanitary District.

BROWNING, GEORGE, M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Stocksbridge Urban Sanitary District.

CHAMBERLAIN, W. W., M.B., C.M.Edin., has been appointed Senior House-Surgeon to the Halifax Infirmary and Dispensary, vice J. P. Gray, M.R.C.S., L.S.A., resigned.

CLARK, FRANCIS WM., L.R.C.P.Lond., M.R.C.S., has been appointed Assistant Medical Officer to the Metropolitan District Asylums Schools, Darenth, vice W. T. Maddison, M.D.Lond., resigned.

DAVIDSON, PATRICK MOIR, L.R.C.P.Ed., L.M., L.F.P.S.Glas., has been reappointed Medical Officer of Health for the Buglawton Urban Sanitary District, Cheshire.

DUNCAN, ALEX., M.B., C.M.Glas., has been appointed House-Surgeon to the Alnwick Infirmary.

GANGE, FREDK. ABNER, M.D.Univ.St.And., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Faversham Rural Sanitary District.

GUINNESS, THOMAS ARCHIBALD, L.K.Q.C.P.I., L.M., M.R.C.S., has been reappointed Medical Officer of Health for the Bampton Urban Sanitary District, Devonshire.

HARVEY, F. G., M.R.C.S., L.R.C.P., has been appointed Resident Medical Officer to the Hospital for Diseases of the Throat, Golden-square, vice Procter Hutchinson, resigned.

HAWKINS, H. C., L.R.C.P.Edin., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Corfe Castle District of the Wareham and Purbeck Union, vice Humble, resigned.

JACKSON, D., M.D., L.F.P.S.Glas., has been reappointed Medical Officer of Health for the Hexham Union District.

LUCAS, ALBERT, M.R.C.S., L.R.C.P., has been appointed Assistant House Surgeon to the Metropolitan Hospital, Kingsland-road, E., vice H. L. Harrison, M.B., resigned.

MARTIN, JOS. H., M.R.C.S., L.S.A., has been reappointed Medical Officer and Public Vaccinator for the Warboys District of the St. Ives Union.

MOXON, WILLIAM, L.R.C.P.Ed., L.M., M.R.C.S., has been reappointed Medical Officer of Health for the Matlock Urban Sanitary District, Derbyshire.

ORD, W. THEOPHILUS, M.R.C.S., L.R.C.P.Lond., has been appointed Resident Surgeon to the Birmingham General Dispensary.

PRETSELL, W. G., M.B., C.M., has been appointed Assistant Medical Officer to Govan Poorhouse and Asylum, vice Geo. Davidson, M.B., resigned.

RAIMES, ALWYN, M.B., C.M. Univ. Edin., has been appointed Medical Officer of Health for the York Rural Sanitary District.

SINCLAIR, F. HOWARD, M.D., L.K.Q.C.P.I., has been appointed Visiting Physician to the Hospital for Consumption and Diseases of the Chest, Belfast, vice Samuel Dickey, M.D., M.Ch.Q.U.I., resigned.

SWALLOW, FRANCIS MCDONALD, L.R.C.P.Ed., L.R.C.S.Ed., L.S.A., has been reappointed Medical Officer of Health for the Silkstone Division of the Penistone Rural Sanitary District.

THOMPSON, T. W., D.P.H., L.R.C.P.Edin., M.R.C.S., has been appointed Medical Officer of Health to the Combined Districts of Hertfordshire and Middlesex; and also to the Harrow Urban and Hendon and St. Albans Rural Districts.

TURNER, GEORGE, L.R.C.P.Lond., M.R.C.S., has been reappointed Medical Officer of Health for the Bishop Stortford Rural and Combined Districts.

VICKERY, W. H., M.R.C.S., L.R.C.P., has been appointed House-Surgeon to the Middlesex Hospital.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Board and lodging provided free, but no salary.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark-bridge-road, S.E.—Surgeon to Out-patients.

GUEST HOSPITAL, Dudley.—Resident Medical Officer. Salary £110 per annum, with board, residence, attendance, and washing.

KIDDERMINSTER INFIRMARY.—House-Surgeon. Salary £140 per annum, with rooms and attendance.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich-road, S.E.—Junior Resident Medical Officer. Salary £30 per annum with furnished apartments, board, attendance, and washing.

NORFOLK AND NORWICH HOSPITAL.—A Physician, and a Surgeon on the honorary medical staff.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, E.—Junior House-Surgeon for six months. Salary £30. Successful candidate will be required to serve another six months as Senior at a salary of £40 if found eligible.

OXFORD EYE HOSPITAL.—House Surgeon. Remuneration, board, and lodging.

PAROCHIAL BOARD OF PENRYGOWN AND TOROSAY.—Medical Officer. Salary £100 a year.

RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY AND SEAMAN'S INFIRMARY.—Resident Medical Officer. Salary £130 per annum (£10 allowed for substitute during annual holiday), with furnished apartments, gas, firing, and attendance.

ROYAL ALBERT HOSPITAL, Devonport.—Assistant House-Surgeon for six months. Remuneration, board, and lodging in the hospital. No salary.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William-street, Strand.—House-Surgeon.

WEST LONDON HOSPITAL, Hammersmith.—Physician. Should one of the staff be elected, there will be a vacancy for an Assistant Physician, for which applications are also invited. House-Physician and a House-Surgeon for six months. Board and lodging are provided.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Resident Assistant. Board, lodging, and washing provided.

Medical Diary for the ensuing Week.

Monday, June 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M. and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, June 12.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.

Wednesday, June 13

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M. Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-ST.—Operations, 9 A.M.; Saturday, same hour.

COLLEGE OF STATE MEDICINE (Theatre of the Chemical Society, Burlington House).—4 P.M. Mr. G. Fleming: Some of the more important Diseases Common to Man and Animals.

EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Annual General Meeting. Dr. Arthur H. Downes: Notes on Diphtheria.—Dr. Robert Cory: The Condition as to Vaccination of One Hundred and Fifty Persons Scarred by Small-pox.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Rev. W. Howchin: Additions to the Knowledge of the Carboniferous Foraminifera.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be exhibited by Dr. G. Granville Bantock, Dr. Richard Smith, Dr. Bedford Fenwick, and the President. Mr. Lawson Tait: The Influence of Removal of the Uterus and its Appendages on the Sexual Appetite.—Dr. Henry T. Rutherford: Notes of a case of Uterine Fibroid successfully treated by Electricity.

Thursday, June 14.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Dr. Donald Mac Alister: On Antipyretics. (Croonian Lecture.)

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Living and Card Specimens at 8 P.M.:—Mr. Silcock: (1) Sarcoma of Frontal Bone; (2) Sarcoma of both Orbits.—Mr. Jessop: Case of Symmetrical Pigment Ring on Anterior Capsule of Lens.—Mr. J. Hutchinson, jun.: Two cases of Cicatrices in Vitreous and Retina. Papers:—Mr. Emrys Jones: On a case of Large Orbital and Intracranial Ivory Exostosis, associated with Cerebral Tumour.—Mr. Edgar Browne: Optic Atrophy in Three Brothers.—Mr. Rockliffe: (1) Notes on Secondary Hæmorrhage after Iridectomy for Glaucoma; (2) Notes on Ophthalmoplegia.

Friday, June 15.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, June 16.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. C. E. Turner: Count Tolstoi as Novelist and Thinker.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 7th, 1888.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 1	30·23	W.	59	50	107	71	50	...	Cloudy
,, 2	30·21	S.W.	63	55	125	80	55	...	Cloudy
,, 3	29·95	S W.	79	65	130	86	57	...	Bright
,, 4	30·11	S.W.	63	57	111	76	54	...	Cloudy
,, 5	30·18	E.	54	50	90	59	50	...	Cloudy
,, 6	29·87	S.E.	53	51	72	61	50	·02	Raining
,, 7	29·86	S.W.	56	53	104	66	51	·01	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

THE large demand made upon our space this week by matters connected with Hospital Sunday compels us, notwithstanding the greatly increased size of our present number, to hold over many articles of importance, as well as several letters on subjects of current interest.

CORONERS' INQUESTS IN BOMBAY.

WITH reference to a passage in a letter from "A Correspondent," dated Bombay, March 23rd, we have received a communication purporting to be signed by "The Coroner of Bombay"; but as the writer has omitted to enclose his card or name, we are unable to publish the letter. Our correspondent of March 23rd is asked to point out one single instance in which the evidence has not been fully inquired into by the coroner in cases of fatal injuries occurring in Bombay, and in which the verdict has not been in accordance with the evidence.

Laurel-leaf.—A. Information may doubtless be obtained of Gen. the Right Hon. Henry Ponsonby, K.C.B., St. James's Palace.—B. The office of the Society, Trafalgar-square.

Inquirer.—By "St. Luke's Hospital" the institution in Old-street-road is no doubt intended.

Dr. A. Gray is referred to Clauses 40 and 41 of the Medical Act, 1858.

SACCHARINE.

To the Editors of THE LANCET.

SIRS,—As you are doubtless aware, an attempt has recently been made in this country to demonstrate that saccharine, so far from being a harmless agent, is in reality a dangerous one. Much has been said respecting the digestive derangements which result from its prolonged employment, while the circumstance that bees and wasps avoid it has been cited as a warning to diabetics. Believing that one fact in medicine outweighs an infinitude of theories, I would state that a patient of mine, who six months ago passed a large amount of sugar daily, and presented other marked symptoms of diabetes mellitus, has been nearly cured by the use of saccharine alone. Since November last he has taken saccharine twice daily in coffee, and not only has there been an entire absence of dyspeptic symptoms, but his urine has become nearly normal, while he has notably increased in strength and weight. I regard saccharine not only as an admirable substitute for sugar, but as a positive curative agent in the treatment of diabetes.

I am, Sirs, yours very faithfully,

Paris, May 23rd, 1888. EDWARD WARREN-BEY, M.D., C.M., LL.D.

ARMY MEDICAL RESERVE OF OFFICERS.

To the Editors of THE LANCET.

SIRS,—When the Royal Warrant was first issued, I was much disposed to join the new reserve, but a little consideration and consultation with several officers of large experience in my district caused me to pause and to ask some questions before taking so important, and, I may now add, so serious a step. Nearly two months ago I applied to the officer commanding my regiment for a definition of the term, "great national emergency," referred to in paragraph 4 of the Secretary of State's instructions on the warrant. The question in due course gravitated to the Horse Guards, to the Director-General, A.M.D., and finally to H.R.H. the Commander-in-Chief. After much delay, and more than one reminder, I have, by request of H.R.H. the Commander-in-Chief, been honoured with the following reply from the Director-General:—"It has been decided that if the National Defence Bill (read a first time in the House of Commons) becomes law, the criterion of a 'great national emergency' will be the embodiment of the Militia." This information may, I think, be of no small importance and interest to brother medical officers who have joined, or who contemplate joining, the new A.M.R. of officers. To my mind the definition is a most dangerous and serious one for civil practitioners having large professional and domestic responsibilities. Army Medical Reserve service might possibly suit a few junior practitioners, who have but little to risk, either professionally or domestically, and who long for military fame at any price; but even they, I think, would do better to join the Regular Medical Staff out and out than to place themselves in a position so uncertain and so insecure. It is, however, I take it, the services of experienced medical officers of Auxiliary Forces that the Government wish to secure (as evidenced by the proficiency examination certificate being a necessary qualification), and it is to such men, I repeat, that the terms of the Royal Warrant, as at present defined, might prove not only most disastrous, but even ruinous. For example, if some Colonial war, or even the scare of a Continental war, were to occur, and a few battalions of Militia were embodied, no other legal authority would be required to enable the Government to at once call out officers of the Army Medical Reserve, and to send them to any duty, or to any place they might deem fit, utterly regardless, of course, of all private or professional inconvenience or sacrifice to them. The fact is, the Government are endeavouring to provide for a possible "great emergency," without any cost to themselves. They seek to reduce the medical *personnel* of the Army below an efficient standard, regardless of the hardships of entailing an extra amount of foreign duty on those who are now serving in the Regular Forces. But lest this device should be too transparent, Government cover their claims on the Medical Reserve by the ambiguous and comprehensive expression, "great national emergency," perfectly well aware that, should pressure arise, those who have unwarily enrolled themselves must obey orders at whatever cost to themselves. It will be difficult to understand how, after this declaration as to the nature of a great national emergency has been made, men can, with their eyes wide open, rush headlong into such needless and heedless obligations.

I will only add that this letter is not written without much consideration and careful investigation, and that, in enunciating my views, I have had accorded to me the advantage of large and eminent military experience.

I have the honour to be, Sirs, yours obediently,

June 6th, 1888. SURGEON, AUXILIARY FORCES.

"CHRONIC SYCOSIS OF THE BEARD."

To the Editors of THE LANCET.

SIRS,—If "Enquirer" find any suggestion commending itself to his judgment in the following transcript from my note-book, the same is very much at his service.

"April 9th, 1888: Mr. A——. Well-marked sycosis barbi; beginning of pustular stage on chin and cheeks. Treatment: Every night wash in very hot water and dry well; then apply some ointment before the fire. ℞ Iodoformi præcipt. opt., M.; lanoline, ad ʒi.; ft. ung.—10th: Better. Continue applications.—14th: Nearly well, but has small abscess on chin. Poultice this two or three hours; wash and dry, and apply the ointment, and return to-morrow.—May 29th: Not seen for six weeks. Did not return, because had no need; chin got well at once. During latter half of April new 'spots' occurred from time to time, which he 'killed' with the ointment whenever discovered. In May let beard grow. We find no evidence of remaining disease now, but I advise him to shave and watch for a fortnight longer." Summary of treatment: Ointment applied nightly during first week, and applied occasionally during second and third week.—I am, Sirs, yours faithfully,

Charlwood-street, S.W., June 2nd, 1888. ALFRED LEACH, M.B.

UNQUALIFIED ASSISTANTS AND PUBLIC APPOINTMENTS.

To the Editors of THE LANCET.

SIRS,—Is it right to leave a practice with public appointments in the hands of an unqualified assistant during the absence of the principal, and when not within hailing distance?

I am, Sirs, yours faithfully.

June, 1888. MEDICUS.

*** It is certainly neither legal nor right to leave a practice with public appointments in the hands of an unqualified assistant.—ED. L.

NAVAL MEDICAL DEPARTMENT.

To the Editors of THE LANCET.

SIRS,—I solicit space in your journal to draw attention to what all must admit to be of the nature of an injustice, in the hope that by its publicity the attention of the Naval Medical Department may be attracted.

Since the improvement in the status of the medical officer, and owing to the augmented struggle for existence in the profession, the services are becoming increasingly popular, and the competition proportionately severe. Other things being equal, the number of candidates is in ratio to the number of vacancies. With a few exceptions, men do not make up their minds to enter until they know what this latter is, and in consequence of this unsettlement considerable inconvenience is inflicted on them. The Indian Medical Service follows the laudable practice of advertising their vacancies a clear six months before the date of the competition. The Naval Medical Service, on the other hand, rarely gives more than about a month's notice of the vacancies they require to be filled. It is under these circumstances that I venture through your medium to ask the Admiralty to adopt the same course as that followed by the India Office. This would conduce both to the efficiency of the Naval Medical Service and the accommodation of the intending candidates. Apologising for thus trespassing on your valuable space,

I remain, Sirs, faithfully yours,

KENNETH CAMPBELL, M.B., F.R.C.S.

Lincoln's-inn-fields, W.C., June 1st, 1888.

JEFFRIES AND HILLS FUND.

To the Editors of THE LANCET.

SIRS,—Kindly allow me to announce the following further contributions to the above fund. A sum of £32 4s. 6d. has yet to be collected.

I am, Sirs, yours obediently,

C. B. KEETLEY, Hon. Sec.

10, George-street, Hanover-square, W., June 5th, 1888.

Charles C. Carter ...	£2	2	0	W. C. Keats... ...	£0	10	6
Frank S. Goulder ...	1	1	0	J. Brennard Neal ...	0	10	6
J. McCarthy ...	1	1	0	Thos. Bell	0	10	0
Ditto (additional)...	1	1	0	M.R.C.S.	0	10	0
J. Brown	0	10	6	K.	0	3	6

GUARDED THERMOMETERS.

To the Editors of THE LANCET.

SIRS,—Will you kindly allow us to state in your next issue that we introduced the clinical thermometers with metal covers to the profession ten years ago, and it is now figured on page 360 of our present illustrated catalogue; and we may add that we have sold them in various forms of metal covers for many years past.

We are, Sirs, yours faithfully,

S. MAW, SON, AND THOMPSON.

Aldersgate-street, E.C., June 7th, 1888.

G. N.—Professor Virchow's report on the examination of the slough from the larynx of the Emperor of Germany appeared in THE LANCET of Feb. 18th last.

Mr. G. Hamilton (Liverpool).—Next week.

ERRATUM.—In Dr. Tomkins' article on "Small-pox in Montreal," published on the 26th ult., page 1020, fifth line from the bottom of first column, for "under eight years" read "under *five* years."

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Niven, Oldham; Sir Joseph Lister, London; Dr. Latham, Cambridge; Dr. A. Gresswell, Louth; Dr. De Watteville, London; Mr. Lawson Tait, Birmingham; Mr. J. S. Wilson, Kiama, N.S.W.; Messrs. Wood and Co., New York; Dr. K. Campbell, London; Surgeon Major Doble, Ootacamund; Mr. W. A. Ellis, London; Dr. Leach, London; Mr. T. Laffan, Cashel; Dr. R. Barnes, London; Mr. Lang, London; Mr. T. S. Ellis, Gloucester; Mr. C. H. Robinson, Dublin; Mr. Warman, Ramsgate; Dr. Oldham, Bletchingley; Dr. Seaton, London; Dr. Gardner, Adelaide; Dr. Pinnock, Ballarat; Mr. Abbs, Dewsbury; Mr. Pool, Dudley; Mr. Ford, Devonport; Mr. Boyce, Norwich; Mr. White, Wolverhampton; Dr. J. H. Aveling, London; Mr. Beale, Tunbridge Wells; Mr. Clapp, Cardiff; Dr. Bell Taylor, Nottingham; Mr. Sidney Thorp, Dulwich; Dr. Gray, Dalton-in-Furness; Messrs. Hothersall and Co., Manchester; Mr. Biddle, Kingston-on-Thames; Dr. T. F. Pearse, London; Mr. Keetley, London; Dr. Laseron, London; Dr. Tomkins, Leicester; Dr. Shirtliff, Kingston-on-Thames; Mr. Hollinshead, Birmingham; Mr. Campbell, Brighton; Mr. E. Hines, London; Mr. J. Abbey, London; Mr. F. W. Clark, Croydon; Dr. C. N. Hewitt, Red Wing, Minn.; Mr. Thomas, Hemel Hempstead; Juventus; F., London; Medicus; Laurel Leaf; Leeds, London; D., Newcastle; The Coroner of Bombay; H. H. J., London; J. W. H., Chester; Simpson-Mackirdy Express Company; M., London; Zeta, London; Surgeon, Auxiliary Forces.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Sawyer, Birmingham; Mr. Chambers, Kidderminster; Messrs. Macmillan and Co., London; Mr. Watt, Durham; Mr. Lewis, London; Messrs. Bason and Sons, Dublin; Mr. D'Evelyn, Ireland; Messrs. Broadbent and Co., Huddersfield; Mr. Jenkins, Manchester; Messrs. Hooper and Co., London; Mr. Hanly, Liverpool; Mr. Laying, Newmarket; Mr. J. Carter, London; Dr. B. W. Richardson, London; Dr. Roberts, North Wales; Mr. Stone, Newport; Mr. Hunt, Manchester; Messrs. Pirie and Orr, Scarboro'; Mr. Smyth, Limerick; Dr. Goodson, Maryland Point; Mr. Clapp, Exeter; Mr. Fallon, London; Mr. Austin, Teignmouth; Mr. Treharne, Kent; Mr. Smith, Sheffield; Mr. Heywood, Manchester; Mr. O'Keefe, Dublin; Mr. Williams, London; Mr. Russell, Scarboro'; M.D., Crewe; Johnson, Liverpool; J. G. B., London; M.A., London; Matron, Southport; Alpha, London; Grove Private Asylum; Student, London; Brighton, London; Liverpool Northern Hospital; M. S., Lancs; Alpha, Torquay; Maltine Manufacturing Co., London; Mars, London; Truth, London; Liverpool Hospital for Women; M.D., London; Iota, London; Medical, Huddersfield; Lady Superintendent, Burton-on-Trent; Dr. McD., Southampton; Sanitas Co., London; H., London; M.D., Bristol; R. P., Surrey; Hamilton Association, London; M. A. P., London; A. B., Bradford; Chorlton Union; Surgeon, Sheffield; Central Medical Association, Manchester; C. H., Cranleigh; Medicus, London; Minor, Manchester; Secretary, Oxford; Matron, Kidderminster.

Amateur Gardening, Christian World, Kentish Gazette, Hampshire Post, Windsor and Eton Express, Surrey Advertiser, Herald and Weekly Free Press, Public Opinion, Dalton News, &c., have been received.

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THE LANCET
SPECIAL SUPPLEMENT,

IN SUPPORT OF THE

METROPOLITAN HOSPITAL SUNDAY FUND.

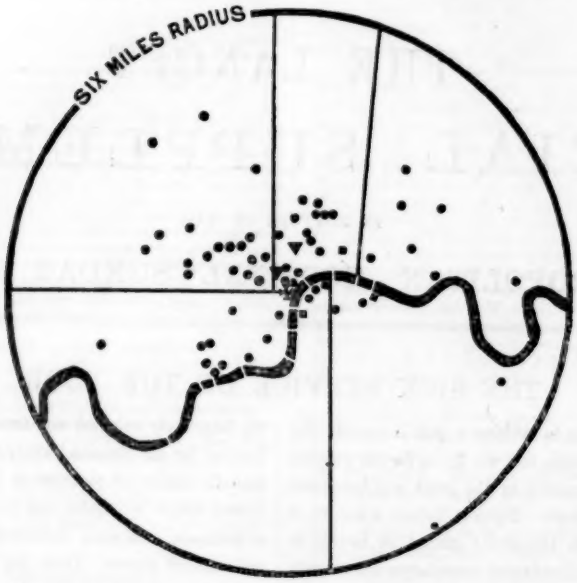
THE SICK SERVICE OF THE POOR.

IT falls to our lot to-day to address a public outside the circle of our ordinary readers, and we do so for the purpose of inviting them to co-operate in the great and beneficent work of the London hospitals. There is, indeed, a branch of this great service to which the public cannot be invited to contribute. Only skilled hands and trained eyes can usefully minister at the bedside of the sick or watch in the room where the issues of a grim debate are life and death. But skill and tact can give a good account of their achievement in the twelve months past, and the summarised statement which the following pages contain affords the best proof of this. It now remains for those who do not possess gifts of healing to mark their sympathy by supplying the funds without which the highest professional devotion would find no sphere in which to manifest itself. Doctor, nurse, and patron are each and all indispensable to this undertaking, and any one without the others, or any two without the third, would be simply powerless in the presence of the overwhelming aggregate of the misery of London. Happily the three elements abound in our metropolis, and their auspicious combination has done much in the past, and is destined, as we confidently hope, to do much more in the future, to redress the inequalities of fortune for the sick, and place at the command of the poorest, when struck by the relentless hand of accident or of disease, those comforts and alleviations which advancing science has already made an appanage of wealth.

Londoners will be to-morrow asked to support their own hospitals, and the claims of neighbourhood, as well as of necessity, will be with justice pressed upon their attention. But it is right that they should bear in mind that other suppliants seek their aid beside hapless fellow-citizens. It is part of the penalty which London pays for its pre-eminence that a large number of the victims of the more aggravated forms of disease come annually from the provinces to share the benefit of its hospitals. A sublime and fascinating paradox is here. From county town and country side the hopelessly crippled and incurably diseased stream into London by the thousand every year, not, indeed, to plunge into its vortex of pleasure, or to embark upon its wreck-strewn sea of enterprise, but in its troubled waters to find a Bethesda, and amid its tumultuous life a quiet asylum and assured repose. Does any man forbid the wayfarers? We trow not, or, if any, he assuredly does not speak in the name of the metropolis. To-morrow it will be for the churches of London to renew this great act of hospitality, and, by replenishing the exchequers of those institutions which attract the sad multitude to our midst, to endorse their action, and authenticate the message of good-will to the country at large of which they are the vehicle and the expression.

But we must not enlarge upon this boundless theme. To our readers one and all we earnestly commend the picture drawn in the following pages of the hospitals of London and their claims; of the Hospital Sunday Fund scheme, and its working. We make no doubt that whoever reads them with an open mind will do nobly in answer to to-morrow's call; nobly, whether on the large scale or the small. And, for our own part, we would far rather influence the men of small means than any other class in the community, for it is upon them that the success of to-morrow's effort must depend. Many a costly sixpence will be contributed by threadbare toilers who know the boon of recourse to a hospital as a matter of personal experience. Many a princely donation will be offered by the rich in a spirit of wise munificence. But the rich and the poor together cannot do what this occasion will demand. It is to the great body of those to whom has been given "neither poverty nor riches," that, in the interest of this enterprise, we look. A generous interpretation on their part of their duty is what we ask, or, should we rather say, a liberal view of their privilege, for surely, if in any case, in this it is emphatically, even tragically, true, that "it is more blessed to give than to receive."

HOSPITAL MAP OF LONDON.



THE CLAIMS OF THE MEDICAL CHARITIES.

BEFORE passing to set out in detail the claims of individual institutions, we propose to bring before our readers, in one comprehensive view, the vast aggregate of hospitals, homes, and dispensaries which have claims upon the Metropolitan Hospital Sunday Fund. For this purpose we have caused the skeleton map to be prepared which is shown above, because no impression conveyed by figures, merely realized by an effort of imagination, can be at all comparable, for vividness, to that which is received by the eye. But, in one respect, our map falls considerably short of representing the whole truth. It has been found necessary to omit the very large and highly useful class of dispensaries altogether, and the limit of area covered does not permit of the introduction of the convalescent homes. Numerically, these two classes of institution are, together, in excess of the hospitals which are shown, and this reservation must be borne in mind when studying the map.

Allowing, then, for these omissions from our skeleton map, our readers will perceive what a world of misery and of charity appeals to them to-day. The area delineated above contains by no means the whole population of London, for the bounding line is drawn at a distance of only six miles from Charing Cross, but it includes no fewer than eighty-three hospitals and fifty dispensaries, and it is served by thirty-four cottage hospitals and convalescent homes. Fully to understand the meaning of the map, it must be further considered that, upon an average, every hospital contains eighty-five beds, and that every bed represents ten sufferers relieved in the course of a year. The help and sympathy of the self-supporting—the sound and happy members of the community—are to-day asked by 70,000 dependent and suffering men, women, and children, who are doomed in the coming twelve months to occupy these beds. Let but our readers realize the fact that every spot upon this map represents fellow creatures

"Stretched in disease's shapes abhorred,"

and in the light of that fact determine each for himself what his Hospital Sunday contribution to the alleviation of these miseries shall be, and we feel confident that the duty—which is indeed a privilege to boot—will be nobly discharged.

In reference to this map there is a matter to which attention has been lately drawn, and upon which our illustration has a useful bearing. It is said, not altogether without justice, that the London hospitals are very much crowded together in the centre, whereas the population to be benefited has drifted away to the more outlying parts. And undoubtedly our sketch does much to confirm this impression. In the Northern Central District, for example, they are placed so near to one another that at two points, the districts of Soho and Bloomsbury respectively, it has been found impossible to show them individually upon the scale here adopted, and triangles have been substituted for groups of points. Furthermore, it will easily be seen that vast populations in some of the most densely crowded parts of the metropolis are placed at a distance of several miles from the nearest hospital, although this will be more obvious perhaps in the sectional maps given below, where the names of localities have been inserted, which, for sake of clearness, have been omitted here. All this, of course, is perfectly true; but its meaning and importance may easily be exaggerated. In the first place, it must be borne in mind that as these institutions are served by the highest medical skill in our midst, and that gratuitously, it is a matter of importance that the hospitals should be reasonably near that quarter of the town where their residences are to be found. It will be seen at a glance that this consideration has had much to do with the distribution of the hospitals; and the advantage thus arising to patients, who receive the best attention that science and experience can ensure, must be reckoned against the disadvantage of remoteness from some of the poorer and more populous districts. But there is another consideration perfectly distinct from this.

Many of the hospitals which are shown crowded together in the Northern and North-Western division of our map—most of them, in point of fact—are special hospitals, and, as we shall find occasion to point out when we come to consider the case of the special hospitals specifically, these largely

serve the needs of places distant from the metropolis, and as to their in-patients, or at least a considerable section of them, they are actually *more accessible* where they stand—in the vicinity, that is, of the great railway terminal stations—than they would be in the thronging suburban districts. Take, for example, the orthopædic hospitals. These, as the reports from which we have quoted on p. 1171 show, receive patients from all parts of the kingdom, and it is difficult to overstate the amount of distress involved in a long journey, with many changes of conveyance, to one of these poor little deformed sufferers, to whom every flexure of a limb and every thrill and shock means exquisite pain. In such a case as this the advantages of a fairly central position far outweigh its disadvantages when all things are duly considered, and it is well, therefore, not to form a hasty judgment upon this point. We are very far indeed from saying that the localisation of London hospitals leaves nothing to be desired, but it must not be inferred from what has been publicly stated, and from what is here shown, that the "say" is all on one side, or that the mischief cannot be exaggerated.

The discussion of this point, bringing into view, as it does, the fact that many things have to be considered in order to form a correct judgment upon the merits of an institution or a system, serves also to illustrate one of the greatest merits of the Hospital Sunday Fund. It is to every right-minded man a prime object of desire that such philanthropic effort as it may be in his power to make should not miscarry for want of wise direction. Yet this wise direction is a matter of the greatest nicety, and no suspicion can be more unpleasant than that a well-meant effort has failed in whole or in part through deficiency in this respect. But where the claimants upon one's charity are so numerous, their claims so various, and, as we all so keenly feel, the fund available to satisfy them so sadly insufficient, any man may be excused for feeling that the task of deciding between them is beyond his strength. Many do feel this, and resign themselves to the position, content to bestow their alms upon the first or the most importunate suitor. And as between the London hospitals, which have all—considering the return which they yield for the funds entrusted to their care—so many and so strong claims to consideration, this may well have been formerly the only practicable course. But the inauguration of the Hospital Sunday Fund has made a great difference in this respect. The committee of that fund considers the various hospitals carefully upon their merits, and awards to every one a sum proportioned to what, according to the best available rule, is ascertained to be its legitimate claim upon public support. Now, we would not for one moment suggest that any donor should subordinate his own judgment in this matter to the judgment of the Hospital Sunday Fund Committee. On the contrary, we appreciate too highly the value of personal interest in all such inquiries to discourage any single person from pursuing them who feels himself equal to the task. But there must always be a large number who cannot do this, and who will be only too grateful to have it done for them. To all such the pains taken by the committee to sift and investigate the claims submitted to them is a distinct and important advantage. They may feel sure that the sum, be it large or small, which they confide to the hands of the council, will be carefully and conscientiously administered, and, indeed, it would hardly be too much to say that it would be wisely administered. At least, if "in the multitude of counsellors there is wisdom," it may surely be looked for in the assembly over which the Lord Mayor presides. Let everybody, then, who wishes to turn his charity to the best account, but whose means or leisure does not permit of his exercising a strict discrimination in its allotment, place it to-morrow in the collection plate. There the widow's mite will be apportioned with the same care as the millionaire's munificence, and thus an added satisfaction may be gained by those who put conscience into their almsgiving, but are not able to inform themselves adequately on all the points involved in a decision of the question here discussed.*

There is another claim which the Hospital Sunday Fund has upon the favourable consideration of the charitably disposed—namely this, that its work is done at an exceedingly small cost. Thus, the collection of last year realized £40,607, and the whole expense of collecting, allotting, and distributing it amounted to no more than £1,714, or less than 4½ per cent. Such a result would, of course, be impossible, were it not that a vast amount of voluntary work—of help in kind—is given for the purpose of facilitating the operations. This is, however, one of the incidental benefits of the institution. Not only has it gathered up the pence and shillings to the great sum total of which we have here spoken, but it has induced an immense number of persons to engage themselves personally and actively in its operations, and has thus diffused an amount of interest never before excited in the work and well-being of the hospitals, and such as never could have been aroused in any other way.

In advocating this great interest to-morrow, therefore, the clergy and ministers of all denominations may feel not only that they are advancing a good cause, but one, moreover, that is many-sided in its goodness. It makes the Church—indeed, the religious world—of London appreciate upon one day in the year its essential unity; it brings into active and cordial co-operation hundreds of good men, whom mutual suspicions—often groundless, perhaps—habitually divide; it yokes in a service of humanity, which is assuredly the service of God, the whole commonwealth of godfearing people; and it brings to bear upon its sacred task the best wisdom and the most approved philanthropy that our metropolis can produce. Surely in such a cause no advocate need be at a loss and no voice need fail of eloquence. Moreover, the great things which have been accomplished in the past forbid us to doubt that great things will be accomplished to-morrow. Our confidence rests upon the same men who have awakened the Churches of London to a sense of their obligations in years gone by, and the same men with the same theme may be trusted to do again at least what they have done before.

But while we have thus a sure ground of confidence, we cannot disguise from ourselves that something more will be required this year than a mere repetition of what has been done already, if the requirements of the case are to be met. In some respects the present is a time of very special need. This will be understood if it is only remembered that some advantages which accrued to the fund in the last and in preceding years will not be available on this occasion. Thus, last year being a season of festivity in connexion with the celebration of Her Majesty's Jubilee, afforded a most exceptionally favourable opportunity for pressing charitable appeals. Moreover, by an exceedingly happy coincidence, Hospital Sunday last year fell upon the day preceding the State thanksgiving at Westminster Abbey, and it is unnecessary to add that abundant advantage was taken of this circumstance by the clergymen and ministers upon whom devolved, on that auspicious day, the public advocacy of the cause. Unfortunately, no equally striking and obvious omen courts remark on this occasion. Another matter to which we may allude is that during each of the last three years, as is well known, the late Dr. Wakley (Editor of THE LANCET, and one of the principal promoters of the movement at its inception) contributed the sum of £1,000, and that this source of income to the fund is now unavailable. Thus, there is a serious possibility of going back, if those responsible for the success of to-morrow's collection do not bestir themselves to avert it. Such an event would be a disaster indeed. The hospitals—sadly embarrassed, many of them, as it is—can only be rendered efficient by increased financial support, and the restriction of the insufficient allowance which they have hitherto received is not to be thought of. We have, on previous occasions, shown that the amount realized by the London collection is but an inadequate contribution when the wealth of the metropolitan churches is considered, and we, for our part, shall not be satisfied until it reaches the annual sum—namely, £100,000—which we have more than once named in this connexion. It may, perhaps, be said that it is impossible to expect this result to-morrow, and that it is idle to name a figure so largely in excess of what has been done heretofore. That may be so, but at least we are re-

* Some further details upon this important question will be found in a separate *résumé* which we have devoted to the constitution and laws of the Hospital Sunday Fund scheme.

solved not to name any lower figure than this, and if it cannot yet be realized, we hope at least that a substantial advance towards it will be recorded this year. In saying this, we do not forget the circumstances to which we just now made allusion; but they, like most other facts, have two sides, and it is quite unnecessary to look only on their discouraging aspect. It is no doubt true that the Jubilee celebrations of last year gave a splendid handle to the advocate of all charitable causes, but on that very account it called a large number of new claimants into the field, and diverted into the unaccustomed channels more money probably than it elicited. These competitive funds, or many of them at least, have disappeared with the Jubilee Year, and now that the streams of almsgiving are flowing once more in their familiar channels, it may reasonably be expected that established claims like those of the hospitals will receive an amount of attention which was denied to them amid the clamour of twelve months ago. Surely, then, it is not asking too much to urge every clergyman and minister on Hospital Sunday to make a point of obtaining from his own congregation a collection which shall exceed by a substantial sum that of the Jubilee Year.

The claims in detail, as here set forth by the several hospitals, have, as far as possible, been drawn up from their own representations, but it should be explained that the hospital authorities are in no way responsible for the form which these statements take, as they have been framed with a view to the position which they now occupy.

CHARING CROSS HOSPITAL.—This hospital has a medical staff numbering twenty-eight physicians and surgeons, and provides a course of instruction for upwards of two hundred students. Situated in the near neighbourhood of St. Giles's and Trafalgar Square, it ministers to the wants of a large resident population of the very poor, and a still larger number of casual visitors whom accidents send to its doors. Thus, on Jubilee day of last year ninety-five cases were treated, and during the Trafalgar Square disturbances as many as seventy-five cases were received in three hours. How large are the demands made upon the hospital by casual patients may be judged from the fact that, out of a total of nearly 22,000 out-patients last year, fewer than 3000 brought letters of recommendation. The Council base a special claim to support at the present time upon the circumstance that they are involved in considerable building operations.

FRENCH HOSPITAL.—Intended to provide relief for foreigners resident in London. Though French in name, the institution extends its hospitality to all foreigners without distinction, and an analysis shows that most European countries, including our own, contribute to its *clientèle*. Probably there is no more effective way of rendering aid to foreigners in distress than by the support of such an hospital as this, where invalids can not only receive the benefit of skilful medical attendance and nursing, but also the homely pleasure of receiving these attentions from neighbours who speak their own tongue and understand their national prejudices. In consequence of the expiry of the lease of the premises at present occupied the hospital authorities have addressed an appeal to the charitable public for a sum of £20,000 to meet the cost of a building adapted to their work.

GERMAN HOSPITAL.—This institution, like the preceding, is established especially for the relief of foreigners in sickness, the patients being in this case principally of German extraction. Nevertheless, about a third of the whole number of in-patients are English, so that, if in respect only of the service which it renders to our own poor, it is entitled to a large consideration at the hands of the British public. Situated at Dalston, conveniently near to the quarter of the town where working German immigrants chiefly congregate, it supplies a want which, apart from some such provision, would severely tax the charitable resources of the East of London.

GREAT NORTHERN CENTRAL HOSPITAL.—This is one of the very few general hospitals of London which, being situated in the suburbs, bring hospital facilities to the very doors of those whom it is intended to relieve. For some purposes a central situation is a great advantage, and enables an institution to command services which, if less accessible, it could not possibly secure. But it has long been felt that the newer and more outlying parts of the metropolis are as yet insufficiently provided in this respect. Those institutions which have made a beginning to satisfy this requirement may justly claim special consideration on that ground. This need is conspicuous on a mere glance at our Hospital Map, and in no quarter more so than in the Northern division, to which this hospital belongs. Unfortunately, an error, which was not discovered until too late for remedy, has been committed by the draughtsman, who has shown this hospital in its old position at King's-cross, instead of where it now stands in Caledonian-road. It is to be hoped that the mistake will not deter any possible supporter from contributing help to the building fund which has been opened for enabling the committee to render their accommodation adequate to the demands made upon them by the locality.

KING'S COLLEGE HOSPITAL.—Situated under the shadow of the Law Courts, this hospital fulfils the double function of affording relief to the sick poor and furnishing a medical school. The professional staff numbers thirty-three, and the magnitude of the work done by its members and under their supervision may be understood from the figures given in our tabulated statement. During the past year considerable expense has been incurred in alterations made to the structure, in order to bring it into conformity with the requirements of modern teaching upon the subject of hospital hygiene, and further for the purpose of improving the accommodation provided for the nursing staff. These expenses have taxed the resources of the committee, which are wholly dependent upon the contributions of the charitable. The hospital, though associated with the college of which it bears the name, derives no revenues from that source, except in so far as the titular connection serves to recommend it to the good wishes of that section of the public which has special interests in the school, and these good wishes in their turn find expression in substantial help.

LONDON HOSPITAL.—Situated on a high road of great traffic, in the midst of a district containing about one million persons, with extensive manufactories on all sides, and in close proximity to the various docks of the metropolis and to great railway centres, the London Hospital administers medical and surgical relief to a population pre-eminently exposed, by its density, to disease, and, by the nature of its employments, to sudden and fearful accidents; while improved facility of communication affords ready access to the institution for the poor of the neighbouring counties, both north and south of the Thames. But, while its situation amidst the poorest classes of the metropolis enables its benefits to be conferred on those most in need of help, that situation itself places the London Hospital at an extreme disadvantage financially; for the inhabitants of the Eastern district (of late years deprived of many wealthy families who formerly resided there) are able to contribute but slightly to its support; and the governors consequently depend upon the liberality of the general public. The medical and surgical staff comprises thirty-one gentlemen, who collectively administer, as will be seen from our tabulated statement, a larger amount of hospital relief than is afforded by any other single hospital in London.

METROPOLITAN HOSPITAL.—This also is situated in the midst of a dense population in the North-East part of London, where, within a radius of a mile, reside upwards of a quarter of a million of persons. The benefits of the institution are perfectly free; that is to say, that no letters of recommendation are required from patients; but the out-patient department has been organised upon the basis of a provident dispensary. Thus, while accidents and urgent cases receive needful help, and other patients are seen *once* without charge, it is expected of such as require a course of treatment that they should join the Provident Department, and make it self-supporting by the payment of a small weekly contribution or premium, payable alike in sickness and in health. The

committee, having obtained premises well adapted to their purposes and providing accommodation for 160 beds, are making at the present time a special appeal for an increase of public support to enable them to perfect their equipment and permanently to enlarge the scope of their operations.

MIDDLESEX HOSPITAL.—Founded so long ago as the year 1745 this hospital has been maintained by voluntary contributions to the present time. A general hospital from the first, it has developed in the course of its long career some features which will give it especial claims to sympathy. Thus the number of out-patient midwifery cases is exceptionally large, and has reached a total very little short of *a thousand cases* in one year. Another of these special features consists in the dedication of three wards to patients suffering from cancer. This charity is distinct in itself, and it is believed unique throughout the world. Here the victims of this almost hopeless malady find a permanent refuge, where everything that human skill and kindness can effect is provided for the cure of their disease, or at least for the alleviation of their sufferings. The founders of the cancer establishment, actuated by a wise benevolence, determined that this refuge should be permanent, by directing that the patients might remain until "relieved by art, or released by death." No one who has interested himself in the unhappy lot of the patients in these wards, usually exceeding thirty-five in number, can have failed to observe how greatly their mental suffering is mitigated by the knowledge that they have here offered to them, if they so desire, a peaceful and permanent refuge for the remainder of their existence. In it they are exempted from the anxious cares of providing for the daily wants of life, as well as from the sad necessity of repeated solicitations for another and another refuge, as the term for which they can be received into other hospitals from time to time draws to its close.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY.—The work of this institution consists very principally in supplying out-patient assistance in the neighbourhood of Greenwich. The existing accommodation for in-patients is limited to twenty-four beds, and the committee complain that the limit thus placed upon their capabilities obliges them to refuse admission in many pressing cases. A new wing is in contemplation, but even on the existing scale the expenditure exceeds the income. It is needless to add that the committee makes a pressing appeal for additional funds.

THE NORTH-WEST LONDON HOSPITAL is the only institution of the kind in the North-West district, and is situated in the midst of a poor and densely-populated neighbourhood. It was opened as a public institution on July 15, 1878. At first, only out-patients were relieved, but a ward for sick children was soon opened with ten cots; and, to meet the increasing demands for admission, additional wards for women and children were added in 1879. The Helena wing, opened in 1883, extends the accommodation to forty-seven beds. One of the new wards is set apart for male adults, there being great need for a general hospital in this district. The special object for which the institution was founded—viz., the treatment of sick—children will, however, continue to be its chief characteristic.

ROYAL FREE HOSPITAL.—Founded 1828, for the relief of sick and destitute persons, whether citizens or foreigners, without letters of recommendation.

ST. GEORGE'S HOSPITAL.—The work of this institution comprises the maintenance of a medical school in addition to the administration of sick relief to some 25,000 patients, including both in-patients and out-patients in the total. The staff comprises physicians and surgeons to the number of twenty-nine. Affiliated to the charity is the Atkinson Morley Hospital at Wimbledon, which receives convalescent patients and gives them the benefit of a visit to country scenes and country air. In connection with the hospital is a medical school, and the whole administration is in the hands of a staff consisting of thirty-two physicians and surgeons.

ST. MARY'S HOSPITAL.—This institution includes a medical school, and is served by a staff of thirty-two physicians and surgeons. It fulfils all the functions of a general hospital, and the Weekly Board base their appeal for increased public support chiefly upon the very large increase which has recently occurred in the work done. This they summarise as follows:—The number of sick and injured persons who participated during the year 1887 in the benefits afforded by this charity was higher than in any previous year. The number of in-patients was 3,315 as compared with 2,352 in 1886, the number of out-patients 14,608 against 12,727, of casualties 11,600 against 9,354, and of maternity cases 429 as compared with 362. The number of beds available for patients throughout the year was 279, and the average number occupied daily was 242·8. The number of cots available for children has now been increased to 32, and there are altogether 281 beds in the hospital.

SEAMEN'S HOSPITAL.—Incorporated 1833. Affords free relief and medical treatment to seamen of all nations, without letter of recommendation or admission ticket of any sort.

TOTTENHAM HOSPITAL.—This institution is conducted under the auspices of the Evangelical Deaconess' Institution, and combines religious enterprise with philanthropic work. The hospital serves not only to afford relief in the locality, where no other hospital is to be found within a radius of three miles, but also as a training-ground for sister nurses, whose labours are devoted to the sick in other parts of the kingdom. In this way it supplies, at the present time, the infirmary at Sunderland and the Protestant infirmaries in South Dublin and in Cork. One ward of the hospital has been recently closed for want of funds in spite of pressing claims upon its accommodation.

UNIVERSITY COLLEGE HOSPITAL.—Founded in connection with the University College, and having special claims upon the support of all connections of that great school, this hospital is, nevertheless, at the present time in an embarrassed financial condition. There is an accumulated debt of over £17,000, due, in large measure, to the very great and growing demands which the "populous North" of London makes upon the resources of its out-patient department. Situated on the edge of the West-Central district and in the teeming neighbourhood of St. Pancras, its charities have increased fivefold in the course of fifty years, and have considerably outgrown the pecuniary support by which, on the part of the public, they have been sustained. In the result the committee has been compelled to contemplate the course of closing some of the wards, or considerably reducing the number of beds, unless the support of the charitable public, which has been recently increased in a most gratifying manner, is still further extended. The hospital has a medical school dependent upon it, and is served by a staff of thirty-two physicians and surgeons.

WEST LONDON HOSPITAL.—This hospital, having been closed for a considerable period during the year 1886, was reopened and in full working last year, with the result that the committee are able to report that their operations reached the full level of the work of 1885, but that, nevertheless, the liberal support extended to them by their subscribers and the public enabled them to effect a very sensible reduction of debt during the twelve months. The scale of their operations may be seen in our tabulated statement, and it only remains to add that the service of the charity is undertaken by a staff of physicians and surgeons numbering thirty-four.

WESTMINSTER HOSPITAL.—Familiar to all frequenters of the Houses of Parliament and Westminster Abbey, the Westminster Hospital carries on its work of charity and education—for it has an affiliated medical school—under the shadow of the two most venerated piles in the whole kingdom. Its propinquity to the ancient church of St. Peter was, during the past year, a valuable source of income to the institution, which derived no less a sum than £3,500 from payments made by visitors for seats upon the occasion of the Jubilee service held at the Abbey, and its repetition after a few days. It need hardly be said that this exceptional help has given a very roseate hue to the treasurer's picture of the financial condition of the charity, which, indeed, has been able, within

the past three years, not only to pay its way, but also to expend upwards of £20,000 upon improvements, without trenching at all upon its capital. While thankfully acknowledging the confidence and sympathy to which these figures eloquently speak, the House Committee point out that the annual subscription list is comparatively small, amounting to less than £1400; and, although this has been supplemented, as the facts above stated show, by munificent donations, they are most anxious to see what furnishes the backbone of their finance substantially strengthened. The medical staff numbers twenty-five, and the school of medicine includes at present 110 students.

CHEST HOSPITALS.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST. During the past year a falling off in the amount received in the form of legacies as compared with the average receipts from that very fluctuating source of income has given the committee some cause for anxiety, and necessitated a special appeal for increased help at the present time.

BROMPTON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Incorporated in 1850. Is almost wholly dependent upon voluntary contributions.

NORTH LONDON HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Established 1860. Comprises an incurable fund and a Samaritan fund.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY-ROAD.—This was the first hospital established in Europe for the study and treatment of consumption and other diseases of the chest. Being situated at the junction of the four comparatively poor parishes of Shoreditch, St. Luke's, Clerkenwell, and the lower part of Islington, can obtain only limited support from the neighbouring residents, and is compelled to look therefore for pecuniary aid to the whole metropolis.

CHILDREN'S HOSPITALS.

ALEXANDRA HOSPITAL.—This hospital, having its headquarters at Queen's-square, Bloomsbury, has a branch also at Bournemouth, and much benefit to the little sufferers in its charge has been realized from the facilities thus offered of providing them with a visit to the seaside. The cost of travelling is at present cast upon the friends of the children, and this shuts out many of the poorest who need this benefit most. There is a Samaritan fund in connection with the hospital for their assistance, but it served only to defray the cost of twelve journeys last year, and is now exhausted. Another ground upon which the committee bases a special appeal is that the premises now occupied in Bloomsbury are old, and stand greatly in need of rebuilding, an enterprise upon which the managers have set their hearts.

BELGRAVE HOSPITAL FOR CHILDREN.—Established in 1866, to afford relief to the children of the poor suffering from non-contagious diseases.

CHELSEA HOSPITAL FOR SICK AND INCURABLE CHILDREN.—The objects of this charity present the most melancholy case that even the dark annals of disease afford. Struck by disabling sickness in the morning of their days, and deprived at the outset of life of any hope of ever taking an active share in its struggles and companionships, they find an asylum in this hospital, where careful nursing and medical attention effects occasionally an unhoped-for cure, and mitigates in other cases, as far as mitigation is possible, the life-long trouble of incurable disease. In order to take advantage of a peculiarly favourable opportunity, the committee are pressing on the work of building new and enlarged premises in which to carry on their work upon an augmented scale.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN.—The claims of this institution could not be better stated than in the words of the resident medical officer who reports as follows of the year 1886-7:—"The number of children admitted into the hospital—viz., 1018—is the largest ever recorded since its foundation. Of this number 456 were infants of two years and under; 119 having been babies of six months and under. There have been 266 deaths; 182 occurring in infants under two years of age. No less than 41 children died a few hours after admission. Such facts are the best explanation of our high death-rate, and indicate the effects of poverty on child life in our district. Those who visit our wards need no such explanation; they see it only too plainly in the number of poor shrivelled babies who occupy the cots. Scores of hopeless, or apparently hopeless, cases are admitted every year. It would be against the spirit which pervades the work of the hospital to refuse admission to such cases, though, by so doing, we could reduce our mortality by at least 60 per cent. In the present financial position of our hospital, it is almost useless to point out how much more each year we feel the want of the promised new wing, insuring, as it would do, increased accommodation for out-patients and for our nursing staff, as well as the much needed facility for the prompt and proper isolation and treatment of infectious cases."

EVELINA HOSPITAL FOR SICK CHILDREN.—In the treatment at this, as at other children's hospitals, the convalescent home fills an important place, and in this case the whole cost, both of journeys and of maintenance, is borne by the Convalescent Fund, and an urgent appeal is accordingly made for help in this direction. Furthermore, the general income of the hospital is barely equal to its ordinary outgoings, and the expenses of last year could only be met by a realization of invested capital.

HOME FOR INCURABLE CHILDREN.—Like the Cheyne Hospital, this institution provides an asylum for those cases of exceptionally hopeless misery in which children of tender years have fallen victims to incurable disease. The committee having to report a falling off in the funds placed at their disposal last year, coinciding with an expenditure swollen to unusual proportions by the making of necessary repairs, found, upon this state of their accounts, a pressing appeal for increased pecuniary help.

HOME AND INFIRMARY FOR SICK CHILDREN AND SOUTH LONDON DISPENSARY FOR WOMEN.—The work of this institution covers, as may be seen from our tabulated statement, a large field, and its claims are stated by the committee with great force, as follows:—"No class of sufferers appeals more warmly to the hearts of all than the little children, whose sufferings arise from no fault of their own, but generally from neglect and want of proper nourishment unattainable often through want of work. Surely, when all are so anxious to help the poverty around, the means should not be neglected by which many a sickly child can be made healthy, and very many by timely care may be saved from a life of suffering."

HOSPITAL FOR SICK CHILDREN.—This institution comprises in addition to the ordinary scheme of a children's hospital, a clinical school, and the committee are able to report that this important department of their work has made marked and gratifying progress, the number of students attending the practice of the hospital having largely increased since last year. But they add, with reference to their general undertaking, "the expansion of the work of the hospital is sorely cramped by the want of a complete building, and the committee cannot but confidently hope that this hindrance will shortly be removed, and that the hospital will be enabled to retain the position it now occupies as the mother and head of hospitals for sick children."

NORTH-EASTERN HOSPITAL FOR CHILDREN.—Of the work of this hospital it will be sufficient to say that it covers the same ground as that of the other institutions of the same class—*i.e.*, general children's hospitals—which have been described in the immediately preceding paragraphs. Of its necessities the following passage from the last report is eloquent:—"The financial position of the hospital at the close of the year is a matter of serious anxiety to the committee, and they have devoted considerable time to the consideration of the question. They are not prepared to make any practical suggestion for clearing off the considerable debt which still

remains owing, and they feel that all their efforts must at present be directed to increasing the income, so as to make it meet the actual and necessary expenditure, and towards this end they most earnestly beg for the help of those interested in this hospital, and of all who feel the strong claims which the sick and suffering have on those whose means enable them to do even a little to alleviate their distress."

PADDINGTON GREEN CHILDREN'S HOSPITAL.—This institution comprises, in addition to the in-patient department, a very important out-patient department, in which it will be seen, from our tabulated statement, that a very large amount of relief was administered in the course of last year. The committee has just carried out extensive building operations for the improvement of the accommodation afforded in this department, and while reporting a highly favourable condition of their finances generally, they base an appeal for special contributions to defray the exceptional cost attendant upon this extension.

VICTORIA HOSPITAL FOR CHILDREN.—To this hospital there is attached a seaside convalescent home, and the amount of work done in the course of twelve months at the two institutions is enormous if regard be had to its quantity alone. But to be appreciated it must be considered in the light also of the nature of the results achieved, and these were very fitly described by the treasurer of the hospital, who, speaking to a gathering of its supporters, said:—"It is a most blessed and beneficent charity, specially devised to help the helpless, to remove from the shoulders of the innocent the burden of suffering that has been cast upon them through no fault of their own—sufferings which bring home to us one of the most terrible denunciations ever uttered against misconduct —'The sins of the fathers shall be visited upon the children.' Now, I do not think I exaggerate when I say that certainly one-half the cases treated within our walls are of this nature, and they, too, are the cases we have the most difficulty in dealing with, and which are most difficult to cure. The only way in which they can be cured at all is by long and patient treatment. We have some, indeed many, cases the result of diseases engendered by want of cleanliness and want of proper and sufficient nourishment. These are very different cases, and far more easy to treat. They yield rapidly to the good treatment and tender care and nursing they get from us. It is marvellous, after a short sojourn in the hospital and a subsequent month at our convalescent home at Margate, to see the change produced in such cases. Instead of the sad, feeble, little atoms that we have received, we are able to send back to their homes bright, sturdy, healthy-looking lads and lasses, with roses in their cheeks and laughter in their eyes."

LYING-IN HOSPITALS.

BRITISH LYING-IN HOSPITAL.—The Board of Management are able to report that, during the past year, their medical officers and midwives dealt with 750 patients, with only one death. But, while able to speak so satisfactorily of the efficiency attained in their work, they have to confess that the financial condition of their institution was such last year as to necessitate the realization of investments to clear it of debt.

CITY OF LONDON LYING-IN HOSPITAL.—The wives of seamen, of soldiers, and of industrious mechanics have a paramount claim upon the benefits of this charity, subject to which other lying-in women may be admitted to share them.

GENERAL LYING-IN HOSPITAL.—The scope of this charity will best be understood from the following summary of its work:—Respectable married women, whose circumstances compel them to ask the aid of this form of charity, are received as in-patients during their confinements, and have the advantage of skilful medical attendance and nursing. Approved midwives are appointed in all parts of the metropolis for the purpose of attending poor married women who are confined at their own homes. Such out-patients are provided with skilful professional advice, when it is needed, and with medicines. The benefits of the hospital have always been specially accorded to the wives of soldiers and sailors. Arrangements can also be made with metropolitan provident dispensaries for granting the advantages of the hospital to their members. In exceptional cases, single women who are found by the committee of management, upon careful investigation, to have shown general good conduct and to be objects of real commiseration, are not refused the benefits of the hospital for their first confinement. The subscription list shows that the charity is largely dependent for its support upon other localities than that in which it is situated, and the annual statement for last year showed that the expenditure exceeded the income by an appreciable sum.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.—From the following definition of the objects of this charity, it will be seen that they are somewhat more comprehensive in the terms of admission granted to unmarried women than those of some kindred institutions:—(1) The delivery of married women, both in the hospital and at their own homes; (2) the delivery of deserving single women, in the hospital, with their first child only; (3) the training of medical pupils, midwives, and monthly nurses. As to the attainment of these objects, the committee say, in their last report:—"The working of the hospital has continued, during the past year, to be satisfactory. The constant and increasing applications by poor women for admission or attendance at their own homes, and than gratitude which the patients have uniformly expressed for the benefits they have received, furnish abundant proof of the high estimation in which the charity is held by those for whose benefit it was founded. That nothing may be wanting to preserve the high reputation the hospital enjoys, and that its efficiency may be maintained, is the constant aim of the committee. The only serious difficulty with which they have to contend is the inadequacy of the means at their disposal. That so beneficent a work will be permitted to languish for want of funds the committee do not believe, and they appeal with earnestness and confidence to the public for extended support to enable them to maintain the charity to its full extent and in the highest state of efficiency."

HOSPITALS FOR WOMEN.

CHELSEA HOSPITAL FOR WOMEN.—This hospital, as its prospectus shows, was founded for the reception and treatment of respectable poor women and gentlewomen in reduced circumstances, suffering from those many distressing diseases to which the female sex is liable, irrespective of social position. A great proportion of women thus afflicted are those upon whom the numberless misfortunes of ill-health most heavily fall—the poor gentlewoman, the governess, the wife of the poorly-paid clerk, the artisan, and the very poor. Their homes are altogether unsuited for the performance of a critical operation, and they cannot there have the nursing and care which a hospital affords. The system of medical relief which has been adopted at this hospital since its foundation is that of requiring the patient to contribute something towards the cost of her maintenance if in a position to do so, while, to the really poor, gratuitous treatment is freely given. The income of the hospital last year fell short of its expenditure by nearly £300.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—This hospital provides, in addition to its in- and out-patient departments, a medical school, by which it claims to do a great and extending work for the benefit, not of its own patients only, but of women everywhere, by spreading a knowledge of the diseases and their treatment to which their sex renders them liable. It is a feature of this school that its students include qualified medical practitioners, of whom no fewer than thirty-eight entered for a three months' course of study at the institution last year. Thus, the committee refer with satisfaction, both to the direct results which we tabulate upon another page, and the indirect results which we chronicle here, of their labours, but the precarious nature and varying amount of the pecuniary support which they receive is a cause of serious anxiety.

GROSVENOR HOSPITAL FOR WOMEN AND CHILDREN.—Established in 1866 for the treatment, as in-patients, of women suffering from diseases peculiar to their sex, and as

out-patients of women and children afflicted with any form of non-contagious disorder.

NEW HOSPITAL FOR WOMEN.—In this hospital it will be seen from our tabulated statement that a large amount of medical relief was administered during the past year, and from the report of the committee it would appear that by far the most serious difficulty which they encounter is that of providing adequate funds for the sustentation of their institution and its work.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN.—The committee of this institution are in the happy position of being able to report that their income for last year sufficed not only to meet the expenditure but also to enable them to do something towards the liquidation of a subsisting debt of £800. They have still, however, some arrears to make good, and are so far from being satisfied with the present position of their charity that they take occasion to announce that the ordinary income of the hospital is about £2000 per annum less than the expenditure necessary to keep open all the wards, to provide for the efficiency of a large out-patient department, and to keep the institution free of debt.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—To the magnitude of the work done at this institution our tabulated statement bears record, as also to the financial difficulties by which it is beset. We give upon the authority of a pamphlet furnished to us from the institution the following particulars of its history.

"At a time when the operation of ovariotomy was looked upon as hopeless, and ovarian disease consequently as beyond the reach of remedy, Mr. (now Sir Spencer) Wells was urgent for the admission to the hospital of ovarian cases. He pleaded—what was felt before to be true enough—that their exclusion was inconsistent with the title and hardly in good faith with the public. But the question was weighted with serious considerations, which touched the very existence of the place. Ovariotomy had ended fatally, with few exceptions, at all the general hospitals. The professional mind was adverse to it; worse than all, the coroner declared he would hold an inquest over every fatal case. The hospital was doing fairly well. Incurring an inquest would be tantamount to closing its doors there and then. Nevertheless, in 1858, Mr. Wells was permitted to operate on three ovarian cases. The operation succeeded in all of them. New methods took the place of old ones; a multitude of observances hitherto overlooked were now found to be essential. The proportionate mortality commenced at one in three, followed, as time went on, by one in four, one in five, one in seven, one in ten, one in fifteen, to *one in twenty*. Up to 1858, when the Samaritan took the disease in hand, foreign hospital records scarcely mentioned the operation. As a matter of course, all their poor ovarian sufferers died. At home the majority of those submitted to the operation also died. At the present day the operation is being resorted to everywhere, and an immense saving of life is annually effected by its means." Yet the institution where the important demonstration was first given, and the safe method slowly perfected, is at present in the greatest difficulty for want of funds, on the one hand unable to make its ordinary income balance its ordinary expenditure, and on the other laid under the immediate necessity of incurring the expense of removal upon the expiry of its lease.

OTHER HOSPITALS.

CANCER HOSPITAL.—This hospital has been in operation since 1851. It began upon a very small scale, but has gradually increased, and has given relief since its foundation to 27,131 persons suffering under this terrible scourge of humanity. It is difficult to imagine any attempt to remove or mitigate human suffering in which the impossibility of deception is more absolute, in which the suffering of the afflicted is more immediately aggravated by neglect or ignorance, and in which the duty of sympathy with the sufferer is more undeniable. The hospital, which has undergone great extension and is freehold, is capable of receiving upwards of 100 indoor-patients. No restriction is placed on the admission of out-patients (the hospital being free), the number of which amount to about 1500 constantly under treatment.

ST. SAVIOUR'S HOSPITAL FOR CANCER.—This hospital was originally founded to test the efficacy in the treatment of cancer of an escharotic known as "Michel Paste," but it was proposed, at the same time, to use every known remedy. Accordingly, other remedies are still being tested, upon the principle of leaving nothing untried that may prove useful in the treatment of the disease. The chief burden of the maintenance of the hospital is borne privately, the contributions of the public being comparatively small.

LONDON FEVER HOSPITAL.—This being the only institution in the metropolis for the treatment of patients—not being paupers—suffering from infectious fevers, discharges a most important function in facilitating the isolation and treatment of this class of disease. The patients pay for their admission at the rate of £3 3*s.* each, but as the cost to the institution averages £11 8*s.* a patient, there is a large margin of outlay to be provided from charitable sources. The resources of the institution were severely taxed by the epidemic of last year, and the committee base upon this fact an urgent appeal for additional funds to spare them the necessity, under which they will otherwise come, of trenching upon their small capital.

ST. MARK'S HOSPITAL FOR FISTULA.—The prevalence of the class of diseases which are treated at this hospital has secured for it a very considerable amount of charitable support. But the relief which it can afford falls far short of the demand made upon it by the suffering poor, so much so that the committee state that were the number of beds doubled they could easily be filled. They, therefore, earnestly desire to realize such an augmentation of their income as will enable them to enlarge the scale of their undertakings.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART AND PARALYSIS.—The only hospital specially devoted to the treatment of heart disease, it deals with a class of disorders which in a marked degree demand prolonged and careful treatment. The present position of the hospital is one of some financial embarrassment, the committee being indebted in the sum of £200 to their bankers, in a further considerable sum to tradesmen, and liable to incur a large outlay upon alterations, repairs, painting, and the renewing of worn-out furniture.

LOCK HOSPITALS (FEMALE AND MALE).—These two institutions, though perfectly distinct in point of organisation and of funds, are subject to one management, and so far subject to a common lot in the matter of their pecuniary needs that they may with advantage be treated together. The hospital and asylum for female patients exist for two purposes:—1. To relieve the bodily suffering and fearful misery of degraded and fallen women, of whom it is estimated that there are in London no less than 50,000. 2. To reform patients, when cured, by offering them a home in the reformatory or asylum attached to the hospital, where, after having been brought under the influence of kindness and sympathy, and careful supervision and training, they are fitted for service or restored to their friends. Since the repeal of the Contagious Diseases Acts the receipts from the War Office (amounting in 1886 to £1127) have ceased. This has naturally crippled the income of the hospital, which is now almost entirely dependent on donations and subscriptions for support. The regular income arising from these sources amounts to only £1160, whilst an estimated yearly expenditure of at least £4000 has to be met. In these circumstances the governors earnestly appeal for help, to enable them not only to consolidate, but if possible to extend, the good work they have in hand.

HOSPITAL FOR EPILEPSY AND PARALYSIS.—In this hospital the principle of requiring from patients some payment, according to their means, in return for the attention which they receive, has from the first been enforced, and latterly the committee has been compelled by the financial position of the charity to give a preference to patients who could afford to

contribute in this way to its expenses—except in urgent cases—over poorer patients who are unable thus to qualify for admission.

NATIONAL HOSPITAL FOR THE RELIEF AND CURE OF THE PARALYSED AND EPILEPTIC.—The present year commences a new era in the history of this institution, for the opening in July last of three wards which, since the rebuilding of the hospital, had, as a matter of prudence, been kept closed, places the whole resources of the building for the first time this year at the service of the sick, adding, of course, very materially to the responsibilities of the board of management.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—A free hospital, the work done by which shows year by year a steady growth, contrasting painfully in that respect with the support received from the public, which varies fitfully. This was markedly the case last year, when, although the accounts showed a surplus of income over expenditure, that result was brought about by the coming in of some important legacies, and took place in spite of diminished receipts from the more ordinary sources of revenue. This fact has occasioned the committee grave anxiety.

ROYAL LONDON OPHTHALMIC HOSPITAL.—This institution, from the great number of patients in daily attendance, is by far the largest and most important eye hospital in the world, and demands for its efficient administration well-devised sanitary and internal arrangements. Important defects in the present buildings, and especially in the wards, have been brought to the notice of the committee by the medical board, as also the fact that the beds are inadequate in number to supply the demands made upon the hospital staff, the consequence being that numerous important cases are necessarily refused admission to the hospital, while operations are often delayed for a long period.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—This is the only special hospital for the treatment of ophthalmic diseases in the whole of London south of the Thames, or indeed in the entire county of Surrey. The committee have been compelled by the demands made upon their charity to undertake the erection of a new building, and make a pressing appeal, both for funds with which to build, and for increased support to enable them to grapple with their ever-growing work.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—This hospital is free to the indigent poor without letters of recommendation, and all necessitous persons applying for relief receive advice, medicines, and attendance gratuitously. In the event of accidents, or in cases of emergency, no applicant is refused. The medical officers are much hampered in their work through not being able to admit many cases that would be better treated as in-patients, owing to the continued impossibility of throwing open the wards that have been closed from want of funds. The accidents and diseases to which the eye is subject are all of a special character, and require not only special knowledge and skill for their successful treatment, but if not so treated *promptly*, they may, and often do, entail a permanent loss of sight, than which there can hardly be a greater calamity. At present, through lack of adequate funds, the institution is being worked at not more than half power.

WESTERN OPHTHALMIC HOSPITAL.—For the treatment of indigent persons afflicted with disease of the eyes. A free hospital.

CITY ORTHOPÆDIC HOSPITAL.—Among three hundred children awaiting admission to the wards of this hospital, there are thirteen poor little incurable cripples, all under six years of age, suffering most intense agony, both night and day, caused by the severe and frightful deformities of their bodies—principally that of hip disease. Their screams and appeals are most heartrending, and on the slightest movement of their limbs by their parents, their pain and torture is made twofold. The sufferings peculiar to this disease are among the most severe known in all hospital practice. The committee are anxious to provide at once the requisite additional cots in some part of the hospital, to enable them to admit these sufferers without delay.

NATIONAL ORTHOPÆDIC HOSPITAL.—The special object and work of the hospital, in restoring the deformed to their natural shape and usefulness, and the unhappy lame or wasted spinal sufferer to comparative health and happiness, is one of true value and importance. Many who were almost hopeless cripples, cured by the surgical skill and timely aid afforded by this charity, are now earning their livelihood, and assisting widowed mothers or orphan families. The great fact demanding the existence of the hospital is that its wards are always full, and the aim of the committee is thus to continue the usefulness of the institution unhampered by debt; help is therefore earnestly asked of all those desirous of assisting to maintain a useful and deserving charity upon a safe financial foundation.

ROYAL ORTHOPÆDIC HOSPITAL.—The objects of this charity are the same as in the two preceding cases. Its condition may be summarised as follows:—The beds are all occupied, and, although the patients waiting for admission are considerably fewer in number now than they have been for many years, yet the rotation list still contains the names of twenty-three applicants. These are cases of the severest kind, which can only be treated as in-patients, and many of them belong to localities far distant from the metropolis, the benefits of this hospital being still extended, as they have always been, to every part of the kingdom. Increased funds must be procured to provide continuously for the maintenance as well as treatment of the full number of inmates, and to keep pace with the constant demands upon the charity; and the committee are continuing the special efforts to that end which were set on foot last year.

HOSPITAL FOR DISEASES OF THE SKIN.—Established 1841, for the medical treatment of those who are suffering from skin disorders.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN.—The revenue of this hospital having been last year the largest ever received by the institution, the Board of Management is able to report that the debts have been reduced by £300 during the year, leaving a sum of £1047 unprovided for on the 31st December. The board earnestly appeal for special assistance to relieve the institution from this pressing liability.

CENTRAL LONDON THROAT AND EAR HOSPITAL.—In view of the intense interest with which the serious illness of the Emperor of Germany has been regarded in all parts of the civilized world, and nowhere more than in our own country, the following extract from the medical report of this institution will be read with no ordinary attention:—"Many of the in-patients last year were suffering from diseases dangerous to life. In a number of these instances, existence has been prolonged and rendered tolerable by operation, and in others a great degree of comfort has been ensured to sufferers in their last moments which would otherwise often have been most agonising. These remarks apply more especially to the malignant class of cases known as cancers. During the past year no less than thirty-six victims of this malady, in some part of the throat, have applied for advice and help. Of this number (after consultation of the full strength of the surgical staff) three have been operated on with a hope of radical extirpation, and four have been treated by some palliative operation, as, for instance, opening of the windpipe (tracheotomy) for relief of distress in breathing. This latter operation has also been performed on several occasions for various other forms of laryngeal narrowing, and has in all cases prolonged life or averted a fatal termination by suffocation."

HOSPITAL FOR DISEASES OF THE THROAT.—Established 1863, for the medical relief of poor persons afflicted with diseases of the throat, ear, and nose. The really necessitous are treated free; others must be provided with a subscriber's letter, or make a small contribution according to means.

LONDON HOMŒOPATHIC HOSPITAL.—Established 1849, for the treatment of disease upon homœopathic methods.

LONDON TEMPERANCE HOSPITAL.—This hospital was founded in 1870 with a view to test and demonstrate the principle that a great reform in the treatment of disease without the ordinary administration of alcohol is both possible and desirable. Its practice is perfectly general, and it would give the board great pleasure if they could prudently open to the public all the 120 beds which the building is capable of containing, but they feel that, before doing this, the liabilities still resting on the building fund should be greatly diminished, and some provision made for an augmented annual income.

DENTAL HOSPITAL OF LONDON.—The miseries to which dental maladies and dental deficiencies give rise are apt to be underrated and overlooked in comparison with the still more serious mischiefs which form the subjects of treatment in the great majority of hospitals, but when it is recognised how vast is the number of patients relieved at this institution, it will be felt that the attention bestowed upon its work is by no means thrown away or the work itself undeserving of generous support. The tabulated results given on another page represent only a part, though a large part, of the result attained, since the educational facilities which the hospital affords are only second in importance to its operative dentistry. With regard to its financial position, there is a deficit of £5700 in the extension account, and the committee are compelled to make a special appeal for the funds necessary to pay off this debt, which presses heavily upon the resources of the charity.

NATIONAL DENTAL HOSPITAL.—Established in 1861 for the relief of patients suffering from diseases of the teeth and deformities of the mouth.

POPLAR HOSPITAL FOR ACCIDENTS.—Located in the vicinity of the docks and amid a vast working class population, this hospital dispenses a large amount of relief in emergency. Its accommodation is, however, very inadequate to the demands of the locality, and the committee have year by year to report that many cases have of necessity been sent on to another hospital at a distance of three miles at great cost of pain and no little danger to the sufferers. In the out-patient department the want of room is still more seriously felt, and the committee have been driven by these necessities to address an urgent appeal for additional support to their friends and the charitable public generally.

It must not be supposed that the foregoing list, though a long one, has exhausted the medical charities of London. On the contrary, whole classes have not yet been mentioned, and a complete description, even on the abridged scale here adopted, would be wholly beyond our present scope. To what still remain to be enumerated it must suffice to refer in the most general terms.

CONVALESCENT HOSPITALS.

Allusion has been already made to the important part which the Convalescent Home plays in the remedial treatment of invalid children, but it must not be supposed that the benefit of this institution can only be realised by sufferers of tender years, or is provided for them alone. On the contrary, most of the great hospitals have now either branches in the country or at the sea coast, or some arrangements for making independent resorts of this description available for their patients. In many forms of disease such a change of air and scene as is thus provided is simply indispensable to sound recovery, and in many more it is helpful in a high degree. The patient pent within the hospital walls and perpetually confronted with its painfully suggestive surroundings, pines and flags: he needs a larger liberty, a broader horizon, a balmier breeze, a more variegated sunlight. To place these within the reach of the indigent patient, and thus afford him facilities for perfecting his cure, is a worthy object of the most enlightened charity, and one that cannot fail of commending itself more and more to the judgment of reflecting philanthropists. The direct popular support at present extended to these institutions is comparatively small. Their value has been more clearly recognised by the committee of the Hospital Sunday Fund, and in this way a large sum is annually diverted into this most useful form of charity, which otherwise would be received by more clamorous, but certainly not more valuable, institutions. We wish that space were at our disposal for dealing with their claims individually, but, as that is not the case, we must be content with a mere enumeration of names.

Metropolitan Convalescent Institution, Walton-on-Thames; Bexhill-on-Sea, Hastings; and Kingston Hill, Surrey.
Bexhill-on-Sea Convalescent Home.
All Saints' Convalescent Home, Eastbourne.
Mrs. Gladstone's Convalescent Home, Woodford, E.
Hanwell Convalescent Home, Middlesex.
Herbert Convalescent Hospital, Bournemouth.
King's College Convalescent Hospital, Hemel Hempstead.
Mrs. Kitto's Convalescent Hospital, Reigate, Surrey.
Mrs. Marshman's Convalescent Hospital, Brighton.
Mary Wardell Convalescent Home, Great Stanmore.
Morley Convalescent Hospital, St. Margarets.
St. Andrew's Convalescent Hospital, Clewer.
St. Andrew's Convalescent Hospital, Folkestone.
St. Leonards-on-Sea Convalescent Hospital for Children.
St. Mary Magdalene Convalescent Home, Paddington, W.
Seaside Convalescent Hospital, Seaford.
Children's Convalescent Homes, Ramsgate.
Princess Frederica's Convalescent Home, East Molesey.

COTTAGE HOSPITALS.

The above-named institutions all open their doors to the public at large, and although naturally affording special advantages to the localities in which they are situated, extend their benefits, and in no stinted measure, far and wide. We have next to mention a class of institutions on a much smaller scale, eminently adapted to meet the needs of a small neighbourhood, and of disease in its less malignant forms. These are the cottage hospitals, as follows:—

Beckenham.
Blackheath and Charlton.
Burstead.
Eltham.
Enfield.
Epsom and Ewell.
Reigate and Redhill.
Shedfield.
Wimbledon.

DISPENSARIES.

The numerous and important class of dispensaries remain to be noticed, last in our order of enumeration but by no means least in point either of collective or individual importance. Dispensaries, indeed, have the credit of having developed more generally than any other form of medical charity the character of provident institutions. In large measure this arises from the nature of the benefit which they provide. The hospital, as to in-patients, at least, is usually a refuge to which recourse will only be had in circumstances of extraordinary and calamitous sickness or mishap. For the lesser indispositions which do not disable the patient, or short diseases which scarcely infringe upon the even tenor of his way, he does not seek their aid unless in the capacity of an out-patient. But for these cases the dispensary provides, and provides also the machinery by which the patient can receive a medical visit in his own home. It is natural that for such purposes provision should be made by way of insurance, and a provident dispensary is neither more nor less than a health insurance scheme. This probably is the reason why the provident principle has been so largely interwoven in dispensary schemes, but, whether that be so or not, the fact is indisputable that so it is, and thus a most important feature is added to their merits, for while they dispense material relief they cultivate also the virtue of independence and the excellence of prudence. In the great majority of cases, however, the provident fund needs to be supplemented by charitable aids, and hence not fewer than fifty dispensaries will participate in the proceeds of the Hospital Sunday collection. As the names of these dispensaries are given and their work is illustrated in the following tabulated statement it is unnecessary to enumerate them here.

TABULATED STATEMENT OF A YEAR'S HOSPITAL WORK IN LONDON.

The subjoined figures have been compiled principally from data furnished by the several hospitals and dispensaries named, supplemented in a few details by the figures of the Hospital Sunday Fund Report. When information from one or other of these sources has not, from any reason, been forthcoming, an asterisk explains the deficiency.

DISTRICT No. I.

ESTIMATED POPULATION	509,000
HOSPITAL BEDS	1051
PROPORTION	1 in 480

(The numbers in the map refer to the table below.)

Name of Hospital or Dispensary.	Sisters and Nurses.	Beds. Total.	Beds. Average occupied.	In-patients.	Out-patients.	Income. Genl. Char.†	Income. Met. H.S. Fund.	Income. Proprietary.††	Total Income.	Ex-penditure.	Extra Expenditure, Buildings, &c.	Total Expenditure.
						£	£	£	£	£	£	£
1 Home for Incurable Children	*	30	29	40	—	590	104	400	1094	1306	—	1306
2 Hospital for Dis. of the Throat	*	18	15	312	5218	679	42	2083	2804	2614	—	2614
3 Hospital for Epilepsy, &c. ...	4	25	17	124	677	1206	78	—	1344	2272	—	2372
4 Lock (Female) Hospital	*	188	66	599	—	2350	271	954	3575	3460	—	3460
5 London Temperance Hospital	*	120	*	674	2595	5063	313	183	5559	6249	—	6249
6 Middlesex Hospital	70	308	238	2413	27,714	7757	1979	5477	15,213	21,535	5224	26,759
7 National Dental Hospital ...	—	—	—	—	23,905	287	18	478	783	*	*	821
8 National Orthopædic Hospital	*	38	34	134	960	602	36	579	1217	1068	—	1058
9 New Hospital for Women ...	5	26	22	263	3348	1103	125	710	1938	2033	—	2033
10 North London Hospital for Consumption	4	46	38	320	2000	5380	313	—	5693	4303	—	4303
11 North-West London Hospital	11	46	36	536	11,160	3390	260	40	3690	3501	250	3751
12 Paddington-green Hospital ...	8	27	20	335	10,776	3592	208	266	4066	2049	2429	4478
13 Queen Charlotte's Hospital ...	*	56	35	902	1193	1927	281	404	2612	3622	—	3622
14 Royal Orthopædic Hospital ...	*	50	47	132	1129	1922	83	445	2450	2094	—	2094
15 St. Mary's Hospital	*	281	243	3315	26,637	8365	1823	1391	11,579	18,846	1044	19,690
16 St. Saviour's Cancer Hospital	10	36	25	119	349	262	104	948	1314	3146	165	3311
17 Samaritan Free Hospital ...	*	52	48	402	4008	4046	479	25	4550	5106	—	5106
18 Western Ophthalmic Hospital	1	20	6	54	1926	558	28	103	689	705	—	705
19 Ventnor Consumption Hospital	10	140	123	666	—	8456	208	1581	10,245	8710	4676‡	13,387
20 Establishment for Gentlewomen	*	25	10	112	—	841	130	1007	1978	2619	—	2508
21 Hampstead Home Hospital ...	12	18	9	116	—	371	57	744	1172	1367	—	1367
	*	1550	1061*	11,718	125,188	58,807	6940	17,818	83,565	*	*	110,054
Child's-hill Dispensary	—	—	—	—	578	40	14	218	272	267	—	267
Hampstead Dispensary	—	—	—	—	9402	267	44	570	881	883	—	883
Kilburn &c. Dispensary	—	—	—	—	3782	401	48	38	485	502	—	502
Kilburn Provident Dispensary	—	—	—	—	3480	65	31	972	1068	1067	—	1067
Margaret-street Infirmary ...	—	—	—	—	2000	386	19	154	559	419	5	424
Notting-hill Dispensary	—	—	—	—	1580	170	26	118	314	303	—	303
Paddington Dispensary	—	—	—	—	7418	173	42	418	633	597	—	597
Portland-town Dispensary ...	—	—	—	—	2005	113	21	8	142	143	—	143
Portobello-road Dispensary ...	—	—	—	—	103	39	7	25	71	51	—	51
St. John's-wood Dispensary ...	—	—	—	—	2735	587	31	12	630	620	—	620
St. Marylebone Dispensary ...	—	—	—	—	4854	679	44	87	810	833	—	833
Westbourne Dispensary	—	—	—	—	3349	81	24	313	418	425	—	425
Western General Dispensary...	—	—	—	—	20,000	1606	120	—	1726	1726	—	1726
Total	*	1550	1061*	11,718	187,164	63,414	7411	20,749	91,574	*	*	117,895

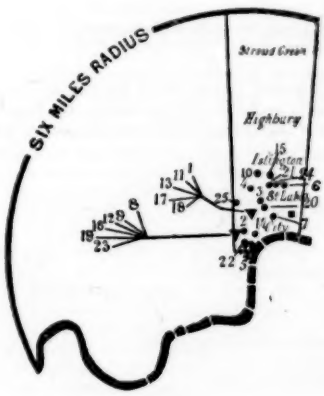
* *No sufficient return.* † *Including legacies.* †† *Including payments by patients.* ‡ *Stock sold to the value of £1676.*

DISTRICT No. II.

ESTIMATED POPULATION 688,000

HOSPITAL BEDS (INCLUDING ST. BARTHOLOMEW'S) ... 2110

PROPORTION ... ... 1 in 320



(The numbers in the map refer to the table below.)

Name of Hospital or Dispensary.	Sisters and Nurses.	Beds. Total.	Beds. Average Occupied.	In-Patients.	Out-Patients.	Income. Genl. Char.†	Income. Met. H.S. Fund.	Income. Proprietary. ††	Total Income.	Ex-penditure.	Extra Ex-penditure, Buildings, &c.	Total Ex-penditure.
						£	£	£	£	£	£	£
1 Alexandra Hospital	*	80	80	144	152	1867	177	378	2422	2434	1017	3451
2 British Lying-in Hospital ...	*	22	7	153	600	617	52	1359	2028	1969	—	1969
3 Central London Ophthalmic Hospital	*	13	8	197	8427	1141	42	392	1575	1357	—	1357
4 Central Throat and Ear Hospital	2	17	16	340	5845	1788	57	32	1877	1966	—	1966
5 Charing Cross Hospital	44	175	125	1686	20,306	7565	940	3000	12,405	13,696	—	13,696
6 City of London Lying-in Hospital	*	30	16	356	1204	386	31	2556	2973	2723	—	2073
7 City Orthopædic Hospital ...	5	25	15	131	2369	1418	63	67	1548	1371	326	1697
8 Dental Hospital	—	—	—	—	47,441	3881	83	193	4157	1450	2801	4251
9 French Hospital	10	35	28	422	3315	3079	208	265	3552	2542	—	2542
10 Great Northern Central Hospital	*	33	29	411	10,000	2943	286	272	3481	3809	—	3809
11 Hospital for Sick Children ...	*	179	126	1186	15,647	11,131	729	623	12,483	11,862	—	11,862
12 Hospital for Women	*	66	53	671	5321	4280	417	1831	6528	7616	—	7616
13 Italian Hospital	*	20	12	197	2279	859	68	21	948	794	—	794
14 King's College Hospital	*	206	151	1969	17,248	10,403	1354	1408	13,165	16,535	8042	25,477
15 London Fever Hospital	21	200	100	982	—	7052	676	5179	13,807	9333	—	9333
16 Lock (Male) Hospital	*	20	14	187	2584	225	73	700	998	1186	—	1186
17 London Homœopathic Hospital	14	90	65	712	8882	5141	203	674	6018	4863	1378	6242
18 National Hospital for Epilepsy	*	*	*	*	*	*	78	*	*	*	*	*
19 National Hospital for Diseases of the Heart	5	25	20	90	2500	1412	146	367	2025	2035	—	2035
20 Royal Free Hospital	*	160	135	1836	23,541	3322	885	1047	5254	*	*	10,891
21 Royal Hospital for Diseases of the Chest	6	80	48	418	5240	3812	208	280	4300	4520	640	5160
22 Royal Westminster Ophthalmic Hospital	4	50	22	363	7853	694	937	395	1926	1731	58	1779
23 St. John's Hospital for Skin Diseases	2	25	19	130	4350	3463	135	—	3598	3155	392	3547
24 St. Mark's Hospital	4	34	24	305	1750	4834	104	819	5757	2349	—	2349
25 University College Hospital ...	77	207	179	2964	44,382	15,345	1510	4383	21,238	22,160	—	22,160
26 St. John and St. Elizabeth Hospital	Sisterhood	51	45	92	—	727	146	641	1514	1450	—	1450
27 National Hospital for Paralysis, &c. ... ... ‡	*	180	110	613	—	8566	281	3281	12,128	9070	3219	12,289
		2023*	1447*	16,555*	241,244*	106,851*	9869	31,063*	147,705*	*	*	160,781*
City Dispensary	—	—	—	—	5482	832	115	166	1113	1328	—	1328
City of London and East London Dispensary	—	—	—	—	28,038	112	11	690	813	801	—	801
Farringdon Dispensary	—	—	—	—	8061	431	57	140	628	673	—	673
Finsbury Dispensary	—	—	—	—	*	340	55	375	770	805	—	805
Holloway and N. Islington Dispensary	—	—	—	—	2028	*	94	*	1050	*	*	*
Islington Dispensary	—	—	—	—	16,978	245	52	551	848	981	871	1852
Metropolitan Dispensary... ...	—	—	—	—	8631	586	42	117	745	763	—	763
Public Dispensary	—	—	—	—	3445	549	52	—	601	703	—	703
Royal Maternity Charity... ...	—	—	—	—	3990	333	75	947	1355	2863	612	3275
St. Pancras and Northern Dispensary	—	—	—	—	2745	288	37	180	505	528	—	528
Westminster General Dispensary	—	—	—	—	4857	402	33	146	581	730	—	730
Total	—	2023*	1447*	16,555*	325,489*	*	10,492	*	158,714*	*	*	172,239*
Estimated to supply omission	—	—	—	—	—	—		—	—	—	—	1,050
												173,289*

* *No sufficient return.* † *Including legacies.* †† *Including payment by patients.* ‡ *The square point shows the position of St. Bartholomew's Hospital.*

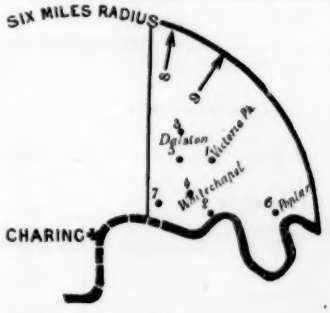
DISTRICT No. III.

ESTIMATED POPULATION... 856,000

HOSPITAL BEDS... 1256

PROPORTION ... ... 1 in 680

(The numbers in the map refer to the table below.)



Name of Hospital or Dispensary.	Sisters and Nurses.	Beds. Total.	Beds. Average occupied.	In-patients.	Out-patients.	Income. Gen. Char.†	Income. Met. H. S. Fund.	Income. Proprietary.††	Total Income.	Expenditure.	Extra Expenditure, Buildings, &c.	Total Expenditure.
						£	£	£	£	£	£	£
1 City of London Chest Hospital	*	164	107	1073	16,817	6737	865	487	8089	9810	—	9810
2 East London Children's Hosp.	24	102	75	1003	18,265	8990	479	160	9629	6615	295	6910
3 German Hospital	*	125	125	1470	23,295	6290	857	2197	9144	9269	—	9269
4 London Hospital	151	776	644	8260	95,780	31,635	3333	16,482	51,450	51,087	5484	56,571
5 North-Eastern Hospital	15	64	31	654	13,882	3063	333	973	4369	4919	—	4918
6 Poplar Hospital	*	50	35	678	9762	2904	240	346	3550	3090	—	3090
7 Royal London Ophthalmic Hospital	*	100	93	2185	24,547	2773	573	1054	4400	5918	—	5918
8 Tottenham Hospital	23	103	62	721	7836	3276	264	385	3925	3925	—	3925
9 Mrs. Gladstone's Home	2	86	65	1078	—	725	208	383	1316	1365	83	1448
10 Metropolitan Free Hospital ...	—	—	—	—	—	1901	199	297	2397	2754	—	2754
11 Invalid Asylum	1	28	20	183	—	606	73	303	982	1113	—	1113
	*	1598	1257	17,305	210,164	62,900	7224	23,047	99,251	99,907	5779	105,726
Eastern Dispensary	—	—	—	—	5837	241	31	314	586	624	—	624
London Dispensary	—	—	—	—	3032	186	26	269	481	419	—	419
Queen Adelaide Dispensary ...	—	—	—	—	4301	559	52	130	741	*	*	428
Stamford-hill Dispensary ...	—	—	—	—	5785	504	52	417	973	592	—	592
Tower Hamlets Dispensary ...	—	—	—	—	4225	708	35	157	900	737	—	737
West Ham Dispensary	—	—	—	—	16,079	861	63	134	1058	837	—	837
Total	*	1598	1257	17,305	249,423	72,019	7483	24,468	103,990	*	*	109,763

* *No sufficient return.* † *Including legacies.*
†† *Including payments by patients.*

DISTRICT No. IV.

ESTIMATED POPULATION... 683,300

HOSPITAL BEDS (INCLUDING GUY'S) 728

PROPORTION ... ... 1 in 940

(The numbers in the map refer to the table below.)

Name of Hospital or Dispensary.	Sisters and Nurses.	Beds. Total.	Beds. Average occupied.	In-patients.	Out-patients.	Income. Genl. Char.†	Income. Met. H.S. Fund.	Income. Proprietary.††	Total Income.	Expenditure.	Extra Expenditure, Buildings, &c.	Total Expenditure.
						£	£	£	£	£		£
1 Evelina Hospital	*	60	55	473	6068	3270	453	850	4573	4917	—	4917
2 Home for Sick Child., Sydnhm.	7	45	38	481	2962	1274	123	—	1397	1381	—	1381
3 Miller Hospital	5	24	19	243	12,034	2943	260	257	3460	3463	—	3463
4 Royal South London Ophthal. Hospital	*	14	9	138	6092	913	94	88	1095	1196	—	1196
5 Seamen's Hospital	*	258	190	2382	5173	6069	573	4532	11,174	11,606	—	11,606
Eltham Cottage Hospital ...	1	7	9	53	—	250	36	—	286	312	—	312
Blackheath and Charlton Cott. Hospital	—	*	*	108	184	639	63	117	819	842	—	842
	*	*	320*	3878	32,453	15,358	1602	5844	22,804	23,523	—	23,717
Camberwell Provident Dispensary	—	—	—	—	*	309	89	1271	1669	1740	—	1740
Forest-hill Dispensary	—	—	—	—	*	228	36	290	554	522	—	522
West Dulwich Dispensary ...	—	—	—	—	104	9	7	26	42	48	—	48
Royal South London Dispensary	—	—	—	—	5143	691	68	101	770	749	—	749
	*	*	320*	3878	37,700*	16,595	1802	7532	25,839	26,592	—	26,776

* *No sufficient return.* † *Including legacies.* ‡ *The square point shows the position of Guy's Hospital.* †† *Including payments by patients.*

DISTRICT No. V.

ESTIMATED POPULATION 900,000

HOSPITAL BEDS (INCLUDING ST. THOMAS'S) ... 840

PROPORTION ... ... 1 in 1070

(The numbers in the map refer to the table below.)

Name of Hospital or Dispensary.	Sisters and Nurses.	Beds. Total.	Beds. Average Occupied.	In-patients.	Out-patients.	Income. Genl. Char.†	Income. Met. H.S. Fund	Income. Proprietary.††	Total Income.	Ex-penditure.	Extra Expenditure, Buildings, &c.	Total Expenditure.
						£	£	£	£	£	£	£
1 General Lying-in Hospital ...	*	24	*	520	904	354	104	2505	2963	2913	—	2913
2 Royal Hospital for Children and Women	*	51	48	459	7325	2731	202	450	3383	3469	—	3469
3 Hospital for Diseases of the Skin	*	10	2	17	6250	384	36	747	1167	*	*	1019
4 Metropolitan Convalescent Hospital	*	500	147	4798	—	6487	625	404	7516	6005	1122	7127
5 Wimbledon Cottage Hospital... ‡	1	12	7	83	—	275	36	105	416	46	6	422
	*	597	204*	5877	14,479	10,231	1003	4211	15,445	*	*	14,950
Battersea Dispensary	—	—	—	—	11,900	28	54	1846	1928	1929	—	1929
Brixton &c. Dispensary	—	—	—	—	4325	442	48	111	601	608	—	608
Clapham Dispensary	—	—	—	—	2388	373	42	—	415	334	—	334
Gipsy-hill Dispensary	—	—	—	—	*	44	21	215	280	280	—	280
Royal South London Dispensary	—	—	—	—	5143	601	68	101	770	749	—	749
South Lambeth Dispensary ...	—	—	—	—	2249	389	47	215	631	604	—	604
South London Medical Aid Institution	—	—	—	—	4199	32	44	312	388	398	—	398
Wandsworth Common Dispensary	—	—	—	—	712	43	14	99	156	156	—	156
Total	*	597	204*	5877	45,295*	12,163	1341	7110	20,614	*	*	20,008

* *No sufficient return.* † *Including legacies.*
‡ *The square point shows the position of St. Thomas's Hospital.*
†† *Including payment by patients.*

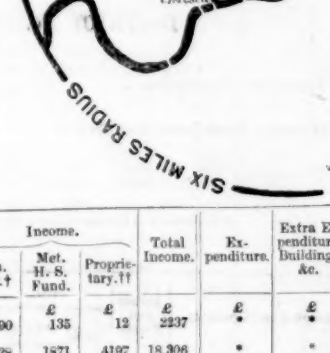
DISTRICT No. VI.

ESTIMATED POPULATION 479,000

HOSPITAL BEDS 1041

PROPORTION ... ... 1 in 460

(The numbers in the map refer to the table below.)



Name of Hospital or Dispensary.	Sisters and Nurses.	Beds. Total.	Beds. Average occupied.	In-patients.	Out-patients.	Income. Gen. Char.†	Income. Met. H. S. Fund.	Income. Proprietary.††	Total Income.	Ex-penditure.	Extra Expenditure, Buildings, &c.	Total Expenditure.
						£	£	£	£	£	£	£
1 Belgrave Hospital for Children	*	22	13	135	2348	2090	135	12	2237	*	*	1403
2 Brompton Hospital for Consumption...	*	321	232	1215	13,623	12,238	1871	4187	18,306	*	*	22,173
3 Cancer Hospital	*	105	77	703	1012	9813	417	916	11,146	8295	322	8617
4 Chelsea Hospital for Women...	*	66	53	308	3450	3350	167	834	4351	3403	1210	4613
5 Cheyne Hospital for Incurable Children	4	24	24	24	—	1692	115	393	2200	1372	25	1397
6 Grosvenor Hospital	4	14	11	95	2128	448	83	407	938	932	—	932
7 St. George's Hospital	90	351	325	3793	22,410	15,061	1875	12,072	29,008	22,831	4578	27,509
8 Victoria Hospital	17	58	53	599	39,432	3194	329	876	4399	4539	40	4579
9 West London Hospital	23	101	81	1278	16,522	5372	521	1481	7374	5387	373	5760
10 Westminster Hospital	48	205	172	2580	20,691	11,454	937	5137	17,528	12,656	4304	16,750
	*	1267	1041	10,820	121,616	64,712	6450	26,325	97,487	*	*	93,735
Brompton Dispensary	—	—	—	—	813	130	23	230	392	375	—	375
Chelsea Dispensary	—	—	—	—	4625	611	47	114	772	723	—	723
Kensington Dispensary	—	—	—	—	5058	713	83	40	836	837	—	837
Royal Pimlico Dispensary ...	—	—	—	—	11,847	287	52	541	880	892	—	892
St. George's and St. James's Dispensary	—	—	—	—	3685	*	59	*	418	*	*	711
St. George's, Hanover-sq., Disp.	—	—	—	—	2750	450	63	182	704	*	*	662
St. Paul and St. Barnabas Disp.	—	—	—	—	2561	316	47	126	489	497	—	497
Western Dispensary...	—	—	—	—	3023	364	58	550	952	970	—	970
Total	*	1267	1041	10,820	165,978	*	6882	*	102,930	*	*	99,402

Including payments by patients.

SUMMARY.

It will be seen from the following summary that the hospitals and medical charities of London, during the twelve months ending 31st Dec., 1887, relieved upwards of 1,067,202 patients at a total cost of £546,733. The total income from all sources was only £501,661, so that there was a deficiency upon the year of £45,072.

No. of District.	Sisters and Nurses.	Beds. Total.	Beds. Average occupied.	In-patients.	Out-patients.	Income. Genl. Char.	Income. Met. H.S. Fund.	Income. Proprietary.	Total Income.	Ex-penditure.	Extra Ex-penditure, Buildings, &c.	Total Expenditure.
						£	£	£	£			£
District No. I.	*	1550	1061	11,715	187,164	63,414	7,411	20,749	91,574	*	*	117,895
,, No. II.	*	2023	1447	16,555	325,489	*	10,492	*	156,714	*	*	173,289
,, No. III.	*	1598	1257	17,305	249,423	72,019	7,483	24,487	103,990	*	*	109,363
,, No. IV.	*	*	320*	3,878	37,700	16,505	1,802	7,532	25,839	*	*	26,776
,, No. V.	*	597	204*	5,977	45,295*	12,163	1,341	7,110	20,614	*	*	20,008
,, No. VI.	*	1287	1041	10,820	155,978	*	6,852	*	102,930	*	*	99,403
	*	*	5330*	66,153	1,001,049	*	35,411	*	501,661	*	*	546,733

* *No sufficient return.*

THE ADMINISTRATION OF THE HOSPITAL SUNDAY FUND.

IN order that our readers may be in full possession of all the facts necessary to enable them to form a judgment upon the claims which the Hospital Sunday Fund has upon their consideration, we have thought it proper to give them a sketch of the organisation and laws of the institution. It will be seen that they lay down quite clearly the principles upon which the distribution of the fund is to proceed. Four things are to be taken into consideration for determining the amount which any one hospital is to receive—

1. Its expenditure. 2. By way of deduction, its income from legacies and realized property. 3. By way of deduction also, its expenses of management. 4. The result so arrived at is to be revised upon a consideration of the merits and pecuniary needs of the institution in question.

Upon the whole, then, the scheme comes very much to this. The expenditure is taken to be the first rough measure of an institution's claims upon public charity. This is then adjusted by writing off against its claims all its exceptional revenue, and then its cost of management is treated as a demerit and its claims are further reduced in proportion thereto. Thus the points considered may be stated thus:—First, magnitude of the operations conducted; second, dependence upon charitable support; third, cheapness of administration, with a final review of any special claim which can be advanced upon the ground of peculiar merit or exceptional need.

Next we pass to consider the *personnel*. The constitution of the council, it will be observed, is strictly representative. A constituent body is first formed by summoning the minister and two laymen as representatives of every contributing congregation. Its first duty is to elect the council for the ensuing year. The council so chosen proceeds to appoint a committee of distribution, and, when that committee has performed its functions and produced its report, the council meets to consider and, if it thinks well, to adopt the report, before any action is taken upon it. Only then, when the committee has considered every case, has reported upon the whole, and when the report so prepared has been adopted by the council, is the actual work of distribution proceeded with.

What does experience teach as to the efficiency of these provisions? We think that the answer to this question may be fearlessly made, that, upon the whole, they have worked admirably well. The following extract from the committee's report of last year is eloquent upon this point:—

"The number of deputations representing committees of various institutions invited to confer with your committee and to offer explanations on matters of apparently unsatisfactory character, was reduced from fourteen to nine. Five of these deputations attended, and in two cases your committee agreed to raise the award. Three institutions sent replies but did not attend, and one made no reply."

Thus it will be seen that a microscopical examination is actually made, and the result eventually attained may be accepted with the fullest confidence. At least it may safely be said, that it is more trustworthy than could be any result at which the inquiries of a private individual could possibly arrive.

THE ESTABLISHMENT OF THE METROPOLITAN HOSPITAL SUNDAY FUND.

THE following extract will serve to remind our readers how comparatively recent has been the importation into London of this most admirable institution:—

"THE METROPOLITAN HOSPITAL SUNDAY MOVEMENT.—The free press of this country has many triumphs to rejoice over, but in no field have its triumphs been more real or lasting than in that of charity. The hospitals of this country—nay, the hospitals of the whole world—and, as a consequence, the sick and suffering poor in many countries scattered over the earth's surface, owe a debt, which can never be repaid, to the powerful and sustained advocacy of the press. Hospital Sunday, the most catholic, the most heart-stirring, the most Christlike and humanising of all modern institutions, is the direct result of, and must remain a lasting monument to, the power of the press. It was Mr. Wright, the editor and proprietor of the *Midland Counties Herald*, who aroused the late Canon Miller and the people of Birmingham to the fact, that collections made simultaneously in all places of worship throughout that town each year, in support of the hospitals, would produce a sum so large as to be remarkable, and results so beneficial to the whole community as to be calculated to ensure for ever to the originators of such a movement the gratitude of many people. Similarly, to the late Dr. James Wakley, the Editor of THE LANCET, chiefly belongs the honour of transplanting the Hospital Sunday movement from Birmingham to Manchester, Liverpool, Dublin, Carlisle, Chester, Birkenhead, and many other towns. In the year 1869, when Dr. Wakley determined to devote himself to the congenial task of making the Hospital Sunday movement national, Hospital Sunday was an institution practically confined to Birmingham, where it had been in successful working for ten years. Although several of the large provincial towns gradually followed the example set by Birmingham, it was not until three years' advocacy, and a special appeal to Sir Sydney Waterlow, on his assuming the office of Lord Mayor in 1872, that the late editor of THE LANCET succeeded in making any practical impression upon the Metropolitan hospital authorities or the inhabitants of London. Dr. Wakley had the satisfaction to announce, on November 30, 1872, that he was authorised to state that Sir Sydney Waterlow, the then Lord Mayor, was entirely in favour of a Metropolitan Sunday Fund, and had promised to give it his warmest support. On the same day, the series of articles, which had appeared in THE LANCET from 1869 to 1872, in support of the Hospital Sunday movement, were reprinted, and the circulation of this pamphlet, followed by the meetings of a representative committee which was speedily formed, resulted in a conference of gentlemen, including clergymen of the Church of England, the Archbishop of Westminster and the Catholic clergy, Dissenting ministers of almost every denomination, members of the Jewish persuasion, the Archimandrite of the Greek Church in London, together with many laymen of all the Churches, at the Mansion House, on January 16, 1873, under the presidency of the Lord Mayor. Then Sir Sydney Waterlow took charge of the Metropolitan Hospital Sunday Fund, of which he has been the active spirit ever since."

HOSPITAL SUNDAY SUBJECTS AND PREACHERS.

THE following is a list of the subjects of sermons to be delivered in the respective places of worship on the 10th inst., on behalf of the Hospital Sunday Fund:—

St. Philip's, Regent Street, Waterloo Place.—Rev. Harry Jones, at 11.15 a.m., on "The Use and Abuse of Hospitals," Rev. Canon Duckworth, at 4 p.m., on "Medical Relief."

Essex Church, The Mall, Notting Hill Gate (Rev. W. Carey Walters).—At 11 a.m.: "The City of God." At 7 p.m.: "Savonarola, the Reformer of Florence."

Rosslyn Hill Chapel, Hampstead (Rev. Dr. Sadler).—"The Blessing of Health."

St. Bartholomew's Church, Sydenham (Rev. Canon Evan Daniel).—"Christianity in its Relation to Human Suffering."

Holy Trinity Church, Lee, S.E. (Rev. B. W. Buckle, M.A.).—"Work for Christ in Connection with Hospitals."

St. Andrew's, Thornhill Square, N.—Rev. A. J. Bridgman.

St. Giles's, Camberwell.—At 11 a.m., by the Rev. F. F. Kelly; and at 7 p.m., by the Dean of Rochester.

St. Peter's Church, Bayswater (Rev. Charles Green).—"Kind Deeds and Spotless Character the Best Ritual."

Parish Church, Stoke Newington, N. (Rev. J. Robinson).—"Christ Healing the Sick."

Stoke Newington Old Church (Rev. J. E. Shelford).—"Charity covering Sin."

St. James's, Norlands, Notting Hill.—At 11 a.m.: the Rev. A. Williamson.

St. Gabriel's, Warwick Square.—At 7 p.m.: the Rev. A. Williamson.

St. Peter's, Vere Street (the Rev. W. Page Roberts).—At 11 a.m.: "Am I my Brother's Keeper?"

Dulwich College Chapel.—At 11 a.m.: Rev. J. Dana. At 7 p.m.: Rev. G. C. Allen. At 5 p.m.: Organ Recital.

Westminster Abbey.—The Rev. E. C. Dermer: "The Witness of Good Works in the Gospel."

St. Mary's, Vincent Square.—The Rev. J. MacArthur: "Our Lord's Work in Earth and in Heaven in its Bearing on Sickness."

Holy Trinity Church, Upper Tooting (Rev. J. Harlock Potter).—At 11 a.m.: "Heal her now."

Holy Innocents' Church, Hornsey.—"Bear ye one another's burdens."

St. Michael's, Paddington.—The Rev. G. F. Prescott—At 11.30 a.m.: "Brotherly Love."

St. Saviour's, South Hampstead.—The Rev. G. F. Prescott—At 7 p.m.: "Sons of Consolation."

Islington Presbyterian Church, Colebroke Row, N. (Rev. Thain Davidson, D.D.).—At 11 a.m.: "The Duty of *Discriminate* Charity."

St. Leonard's, Streatham (Rev. J. R. Nicholl).—Acts x. 38.

St. Jude's, South Kensington, S.W.—At 11 a.m.: the Rev. Prebendary Forrest, D.D. At 4 p.m.: Flower Service. At 7 p.m.: Archdeacon Farrar.

Emmanuel Parish Church, Forest Gate, E.—At 11 a.m. and 3.15 p.m.: the Right Rev. Lord Bishop of N. Queensland. At 6.30 p.m.: the Rev. R. Ross.

St. Matthew's, Denmark Hill.—At 11 a.m.: Rev. J. B. Pattrick, M.A. At 3 p.m.: Rev. E. A. Wesley, M.A. At 7 p.m.: Rev. Sinclair Carolin, M.A.

St. Stephen's, South Lambeth.—At 11 a.m. and 6.45 p.m., by the Vicar.

St. Augustine's, Honor Oak Park.—At 11 a.m. and 7 p.m., by the Vicar: "Receivers and Givers."

St. Saviour's, Denmark Park.—Rev. H. Swithinbank: "Love looking Onwards."

Hampstead Parish Church.—S. B. Burnaby: "Christian Brotherhood."

Woodford, Essex.—Rev. W. E. Anderton: "The Saviour of the Body."

Curzon Chapel (Rev. Edward K. Gray).—At 11.30 a.m.: "The Tetrarch's Choice." At 6.30 p.m.: "Dives and Lazarus."

St. Martin's Church.—Rev. J. F. Kitto: "Benevolence the Natural Expression of Christianity."

St. Stephen's, Westminster.—Rev. William Sinclair—Morning: "The Gift which Cost Nothing."

St. George's-in-the-East.—Rev. William Sinclair—Evening: "The Touch of the Hand of God."

Hornsey Parish Church.—Rev. J. Jeakes—Morning: "The Use of Pain."

St. Peter's, Lee.—Rev. R. J. Simpson—Morning: Romans, v. 12, and 1 Cor. xii. 25.

Holy Trinity, Sydenham.—Rev. Henry Stevens, M.A.: "What we are to others, an evidence of what we are ourselves and a prediction of what we are to be in the worldly life to come."

Theistic Church, Swallow Street.—Rev. Charles Voysey: "Moral Uses of Pain."

Christ Church, Brondesbury.—Rev. C. W. Williams, D.D.: 2 Kings xx. 5-7.

Park Chapel, Camden Town.—Rev. Joshua C. Harrison: "Sorrow turned into joy" (John xvi. 20).

St. Mary, Newington.—The Rector: "Willing Sacrifice—the Characteristic of Christian Almsgiving."

Dutch Church, Austin Friars, E.C.—Rev. A. D. Adama Van Scheltema: "To have all things in common is also to bear one another's burdens."

Trinity Church, Hampstead.—Rev. H. Sharpe: "James yielded his life for Christ—what are we doing for the afflicted and the sorrowing to-day?"

St. Peter's, Brockley, S.E.—Rev. G. F. Grundy—Morning: "Uses of Pain." Evening: "Remedies for Pain."

Belgrave Presbyterian Church, W.—"The Disciples filled with Joy and the Holy Ghost."

Holy Trinity, Blackheath Hill.—11 a.m.: Rev. J. G. Leeke. 7 p.m.: Rev. S. F. Hooper: "Perfect through Sufferings."

St. Mark's, Notting Hill, W.—Rev. W. E. Emmet: "The Beatitude of Suffering" (Acts xx. pt. of v. 35).

All Saints' Church, Peckham.—Rev. T. J. Gaster.

St. John's Church, Clapham Rise, S.W.—Rev. C. H. C. Baker, D.D.—Morning: "God's Stewards." Afternoon: "Receiving and Giving." Evening: "My Neighbour."

St. James's Church, Knatchbull Road, Camberwell.—Rev. J. D. Dyke—11 a.m.: "She hath done what she could."

St. Paul's, Clapham.—Rev. G. Forrester—Morning: "The Widow's Mite." Evening: "Sick nigh unto Death."

Christ Church, Greenwich.—Rev. D. Reith: "This World's Good."

West Hackney Parish Church.—Morning: Rev. H. E. B. Arnold, M.A. Evening: Rev. L. H. Bradford.

St. Augustine's Church, Kilburn.—10.30 a.m.: "Inasmuch as ye have done it unto the least of my brethren, ye have done it unto Me." 7 p.m.: "The Example of St. Barnabas, the Son of Consolation."

St. John's, Hackney.—Rev. J. Grant Mills: "Bearing One Another's Burdens."

Bayswater Synagogue, Upper Westbourne Terrace.—Rev. D. H. Adler: "The Lessons of the Sickbed."

Heath Street Baptist Chapel, Hampstead.—Rev. W. Brock: "The Heart of a Stranger."

Camberwell Green Congregational Church.—Rev. C. Clemance, B.A., D.D.: "The Mission of Christ's Disciples to the World."

St. Barnabas, Addison Road, Kensington.—11 a.m., Rev. Prebendary Billing, M.A.: "Hospitals and the East End of London." 3.30 p.m., Rev. Frank Smith, M.A.: The Children's Flower Service. 7 p.m., Rev. G. R. Thurston, M.A.: "The West London and the Victoria Children's Hospitals."

Clapton Park Congregational Church.—11 a.m., Rev. W. J. Woods, B.A.: "Christ and the Poor."

St. John's, Brixton.—Rev. C. J. R. Cooke—Morning: "Is there no balm in Gilead; is there no physician there?" 3.15 p.m.: Children's Flower and Hospital Soirée. 7 p.m.: Rev. W. J. Beechey.

All Saints', Friern Barnet, Whetstone, N.—Morning, Rev. H. Stobart: "Sympathy." Evening, Rev. H. S. Miles: "The Touch of God's Hand."

St. James's, Garlick-hithe, Upper Thames Street.—Rev. A. Matthey: "I was sick and ye visited me."

St. Luke's, West Holloway.—At 11 a.m., the Rev. Richard Glover, M.A.: "The Care of Christianity for Bodily Health." At 7 p.m.: the Rev. C. Hutchinson Edwards.

The Great Synagogue, St. James's Place, Aldgate.—On the 9th inst., Rev. G. J. Emanuel, B.A.: "The patriarch Abraham's merciful provision for poor travellers."

St. Philip's, Kensington.—Morning: the Rev. W. H. Dyson, M.A. Afternoon: the Rev. H. Brick, M.A. Evening: the Rev. W. Smale, M.A.

All Saints', South Acton.—The Rev. A. Hunter Dunn—Morning: "The Claims of our Hospitals Universal." Evening: "Sicknesses and Their Lessons."

St. George's Church, Campden Hill, W.—Rev. Walter Crick, M.A.: "The Martyrdom of Man."

St. Saviour's Church, South Hampstead.—11 a.m., Rev. Charles Evans-Jackson, B.A.: "Discipline of Pain."

St. Paul's, Onslow Square.—11 a.m.: the Lord Bishop of Liverpool. At 3.30 and 7 p.m.: the Rev. H. W. Webb-Peploe.

Clapham Congregational Church.—Rev. J. Guinness Rogers: "Christian Stewardship."

Marylebone Presbyterian Church, Upper George Street.—Rev. Dr. Donald Traver: "I was sick and ye visited me."

St. Paul's, Paddington.—Rev. S. H. Cowell: "I was sick and ye visited me."